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ABSTRACT

Elementary school instructional media centers (IMC's) were studied to determine the presence or absence of six conditions identified as promoting positive self-concept: cooperation, independence, success, positive atmosphere, challenge, and a feeling of value or acceptance. Following a review by a panel of experts of a preliminary observation sheet of activities and physical settings, a preliminary survey instrument, and interview questions for students and media specialists, these conditions were investigated during 1-week study periods in each of three Wisconsin elementary school IMC's representing rural, urban, and suburban communities. The schools chosen had a full-time media specialist, a full-time aide, a variety of current printed and audiovisual materials, and a program of activities and services. Research methods included observation, interviews with students and media specialists, and diaries. Results indicated that the conditions of independence, cooperation, and success were observable. Students found the IMC atmosphere to be positive, felt valued, had many experiences with and opportunities for success, cooperated naturally, and found the IMC to be a challenging area. A five-page reference list and 83 tables are included, as well as 17 appendices containing the survey instrument and related documents. (LMM)

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A STUDY TO DETERMINE THE PRESENCE OF OBSERVABLE
CONDITIONS OF POSITIVE SELF-CONCEPT IN ELEMENTARY
SCHOOL MEDIA CENTERS

A thesis submitted to the Graduate School of the
University of Wisconsin-Madison in partial fulfillment of
the requirements for the degree of Doctor of Philosophy

by

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A STUDY TO DETERMINE THE PRESENCE OF OBSERVABLE
CONDITIONS OF POSITIVE SELF-CONCEPT IN ELEMENTARY
SCHOOL MEDIA CENTERS

Dianne Talmadge McAfee

Under the supervision of Associate Professor Ann Becker

The purpose of the study was to determine whether an elementary school instructional media center (IMC) which had a full-time media specialist, a fulltime aide, a variety of current printed and audiovisual materials, and a program of activities and services had components which could be identified as those which could be said to promote or enhance positive self-concepts in elementary school students. The conditions selected for study were: cooperation, independence, success, positive atmosphere, challenge, and feeling of value or acceptance. Following a pilot, these conditions were investigated during one-week study periods in each of three Wisconsin elementary school IMCs representing rural, urban, and suburban communities.

The study utilized an observational, case-study approach. Research methods emphasized included observation, interviews, and diary. In addition to the investigator who conducted student interviews with students in grades three and up, as well as interviews with media specialists, the study utilized a panel of experts and two observers, one of whom observed for the entire study period of

one week in each school. The second observer was utilized for one full day (or 20 percent of the time) in each school to insure interobserver reliability, which was high for all schools studied.

Materials designed for this study included a survey instrument, which was the basis for the selection of schools to be studied; an observation instrument; interview questions for the media specialists, interview questions for the student interviews.

A review of research findings shows that each method utilized, i.e., observation, interview, and diary, ultimately complemented one another. Varied emphasis of research methods, whether factual, conceptual, or attitudinal, in the final analysis supported and enhanced the findings of the other.

Results of the study showed that all six conditions studied were present in the schools being studied. Findings of this study, therefore, indicate that the IMC can make a difference in the individual child's development of a positive self-concept.

The study yielded suggested hypotheses, implications, and practical recommendations for further examination.

Ann D. Becker

, Associate Professor
Major Professor

CHAPTER ONE

THE PROBLEM

Research on the contributions of instructional media center (IMC) programs to the education of K-12 students can be said to be in its early stages. In a practical view, research findings, which could be applied to the development or enhancement of educational practices that exist but are underutilized, are highly desirable. Often the mechanisms for putting these practices into full operation already exist. There are numerous examples of successful programs directed for years by competent personnel. In spite of successful examples, there are underutilized programs in existence. One such underutilized program in elementary schools is the elementary school IMC program. The lack of centralized IMCs with professional media specialists (even on a part-time basis) in approximately 68.6 percent of Wisconsin's elementary schools (Wisconsin Department of Public Instruction, 1979) illustrates in a glaring way that decision-makers and citizens on the whole are not convinced that elementary school IMCs make a necessary and important difference to a young child's education.

Why is it that decision-makers, citizens, and even some educators are not convinced that elementary IMCs and media specialists are basic to an effective elementary school educational experience?

Perhaps it is due, in part, to a lack of a research foundation upon which practices can be based.

As a person with professional training and experience in elementary education and instructional media program development, I have been alternately intrigued, angered, and disgusted with what I perceive to be the unjust status to which many elementary school IMC programs have been relegated. These feelings of frustration have resulted in my deliberation of how the excellence in elementary school IMCs which employ full-time media specialists, have a variety of current material, and a full program of activities and services can be communicated. Thus, the indepth planning for a case study of selected elementary school IMC programs began.

Background to the Problem

The study itself focused on the contributions of the elementary school IMCs as they related to the area of positive self-concept in children of elementary school age. To focus most clearly on self-concept contributions in an elementary IMC setting, it was necessary to examine theories of self-concept and learning, in general, and their applicability to school settings. These theories are discussed in Chapter Two.

Self-Concept and Schools

Self-concept, a familiar term in the field of education, cannot be claimed by education as its own. Other areas viewed the

self-concept prior to its entry into education. It was probably evident first in the field of psychotherapy (Rogers, 1969).

Regardless of its beginnings, the literature is consistent in its emphasis on the effect of a child's early years in the development of a self-concept. Gordon (1972) viewed the early years as being of vital importance in setting the general direction for self-concept, while Purkey (1970) indicated that the early years of life were most critical in forming the child's opinion of herself/himself.

In most instances, literature on the early years and self-concept put greatest emphasis on the home and its environment, particularly on the role of parents. Schools, however, were also found to influence a child's self-concept. Gordon stated that upon school entry, the total self is quite plastic; quite open to change. Thomas (1973) also found that the process of developing an adequate self-concept was influenced by school experiences. He cited a study by Ministry (in Thomas, 1973) which indicated that the school was second only to the home in determining an individual's attitudes of self-acceptance and self-rejection. Likewise, Purkey (1970) indicated that next to the home, the school was the single most important force in shaping the child's self-concept. La Benne and Greene (1969), in describing the relationship of the teacher and the student, indicated that students became what they were thought to be.

Self-concept would not receive so much attention were it not for its relationship to learning. It is tied directly to understanding the ways in which students' minds work and why. The science

that is basic to teaching is said to be the psychology of learning (Wilson, Robert and Michael, 1969). Of prime concern to educators is academic performance. While research data do not provide clear-cut evidence of what comes first -- a positive self-concept or scholastic success, the data stress a strong reciprocal relationship and provide evidence that enhancing the self-concept is a vital influence in improving academic performance (Purkey, 1970).

The review of self-concept literature discussed at length the role of significant others -- the persons who influenced the development of self-concept in children. While parents were given prime importance in promoting self-concept in children, educators received recognition as being shapers of self-concept in children. Several researchers such as La Benne and Greene (1969) even described specific ways that teachers could promote the development of positive self-concepts in children in the classroom.

While the classroom is probably the single most important place in the school where positive self-concepts should be fostered, the educational experience is broader than the classroom. Today in many schools, a child voluntarily spends time in the instructional media center (IMC), where that child can independently pursue interests and work on class projects.

IMCs can first be expected to support the educational goals of the district. These district goals, of course, relate to a large extent to competencies that are expected in instructional settings, whether those settings are found in the classroom or the IMC. The

most common aims of IMCs include creating the right environment for learning, providing materials, meeting curricular needs, meeting personal and instructional needs of students, encouraging creativity, self-fulfillment and inquiry. Does the IMC and its staff also contribute to a positive self-concept in children? No research has been found which substantiates the widely held belief that the elementary school IMC contributes to the development of positive self-concepts in children.

This dissertation sought to look beyond the influence of the classroom to the elementary IMC. With its emphasis on developing independence, experiencing success, encouraging self-inquiry, does it, too, promote the development of a positive self-concept?

No research was located which placed emphasis on the component in the child's development of self-concept which comes from the instructional media center. It is a practical issue which, if supported, could greatly alter the reluctance of school boards and school officials to provide an instructional media center with professional and support staff. If supported, such a place would be desirable and/or needed to foster the development of the positive self-concept which appears to be so vital to the achievement of optimal learning.

Statement of the Problem

By its nature, the elementary IMC was designed to be an integral

part of the instructional program, rather than a distinct entity. Its existence within a larger framework, however, has made it difficult to identify distinct contributions of the IMC to the educational program. This inability to identify distinct characteristics of the IMC which impact the instructional program, makes it possible for the elementary IMC program to be seen by some as an unnecessary appendage of the instructional process subject to discontinuation or reduction. Some consider an IMC ineffective in influencing the education of elementary school students. However, a lack of identification of strong characteristics of IMCs does not mean, therefore, that IMCs are ineffective.

The purpose of the study was to determine whether an elementary school IMC which had a full-time media specialist, a full-time aide, a variety of current printed and audiovisual materials, and a program of activities and services, had components which could be identified as being those which could promote or enhance positive self-concepts in elementary school students. The following conditions which appeared most frequently in self-concept literature were selected for study: cooperation, independence, success, positive atmosphere, challenge, feeling of value or acceptance. Utilizing a panel of experts and the two study observers prior to the study, evident indicators for each of the six conditions were agreed upon based upon the educational background, experience, and professional judgment of the panel, the observers, and the investigator.

Following a pilot, the self-concept conditions were investigated in three Wisconsin schools having IMC programs as generally described in the preceding paragraph in this section. The three

schools represented a rural, an urban, and a suburban community setting.

The case study utilized three research methods which were observation, interview, and diary. Each method was analyzed independently and later compared for further substantiation of findings. The study also utilized statistical procedures to investigate relationships of some observed activities as they related to the type of school and day; to the type of school and the general grade level at which the activity most frequently occurred.

Objectives of the Study

Overall Objective:

1. To determine whether the elementary school IMCs selected for study have components which contribute to positive self-concepts in elementary age children.

Other Objectives:

2. To compare similar IMC programs offered in a rural, an urban, and a suburban setting.
3. To interpret the impact of the philosophy of the media specialist on the IMC program.
4. To discover student attitudes toward the IMC, the media specialist, and IMC activities.
5. To identify those conditions to which the IMC contributed most substantially.
6. To identify activities which most substantially support each condition studied.

7. To describe any patterns or relationships which emerged.
8. To identify IMC activities which may be especially desirable to promote positive self-concepts.
9. To generate hypotheses for further study.

Assumptions

The basis for this study lay in a belief in observational ethnology as a prerequisite to the formulation of specific hypotheses and to the conduct of true experimental research. The theoretical framework underlying the assumptions which follow was drawn from three areas of inquiry: learning theory; theories of self-concept development in children; philosophical bases for instructional media centers. The literature in these three areas will be explored more fully in Chapter 2. However, brief mention of it will be made along with the following assumptions.

1. Children do not all have the same learning preferences or learning styles.

Learning theorists have long accepted this as one of the basic principles involving learning. Rogers (1969) was one of the major proponents of learning facilitation and the creation of an environment which is responsive to the individual learner.

2. Cooperative goal structures enhance self-concept.

Johnson and Johnson (1974) are noted authorities on instructional goal structures. The possible goal structures which they

defined were competitive, cooperative, individualistic, and non-structured. Johnson and Johnson recommended that the cooperative structure be used when instructional objectives focused on cognitive and affective outcomes, including a development of positive self-attitudes and a belief in one's basic competence and worth.

3. IMCs seek to promote a cooperative goal structure, as well as one which promotes independence.

Instructional media program philosophy is rich in aims which support a cooperative goal structure, as opposed to a competitive one. The worth of the individual, and the development of independence in that individual are also promoted. The philosophical basis is well illustrated in the following statements:

Programs of media services are designed to assist learners to grow in their ability to find, generate, evaluate, and apply information that helps them to function effectively as individuals, and to participate fully in society. Through the use of media, a student acquires and strengthens skills, develops a spirit of inquiry, and achieves greater self-motivation, discipline, and capacity for self-evaluation. (Media Programs: District and School, 1975, p. 4)

4. Some school experiences program students for failure.

Purkey (1970) cited existing studies to indicate the following:

(a) schools can sometimes be the enemy, continually giving failure and defeat to the very children who need to experience success the most; and (b) the image of school grows less positive in a gradual way with time, and communicates a sense of inadequacy.

Johnson and Johnson (1974) found in an analysis of research

studies in which the competitive goal structure was used that higher levels of anxiety and a more continued state of anxiety could be expected to be found. Studies showed that losing could result in a decrease in self-esteem and could produce anxiety. Thus, a continuous competitive goal structure is not desirable.

5. A primary goal of education should be the facilitation of change and learning.

Rogers stated:

The only man who is educated is the man who has learned how to learn; the man who has learned how to adapt and change; the man who has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security. Changingness, a reliance process, rather than upon static knowledge, is the only thing that makes any sense as a goal for education in the modern world. (1969, p. 104)

The 1980s have been described by many as the "Information Revolution." Currently existing technology such as microcomputers and yet to be developed technology show that learning is not static, and individual approaches to learning strategies are necessary.

6. Certain indicators of self-concept are observable.

The study was based on this assumption. The literature is abundant with measures of observable indicators of conditions of self-concept. Using these studies as a guide, this study was developed so that selected IMC observable activities would be utilized as indicators of the presence of the six conditions of self-concept selected for study.

7. The greater the percentage of flexible (or open)

scheduling in the IMC as compared to rigid scheduling of classes on a per week basis, the greater will be the opportunities for individual utilization of the IMC.

Based on this assumption, schools for study were selected which indicated flexibility in scheduling, so that during portions of each week, there were times when no classes were scheduled.

Questions

In order to investigate the overall concern about whether IMC programs have conditions which are said to promote positive self-concepts in children, a number of questions were formulated. The questions relate to the conditions which were studied, namely cooperation, independence, success, challenge, feeling of value/acceptance, positive atmosphere. The questions are divided according to the research method utilized. Questions which were designed to focus on the observation instrument are the most specific.

Observation Model Instrument

The observation model focused on three conditions being studied: cooperation, independence, and success.

Questions generated for analysis were as follows:

- 1) Were there any differences depending on the day of the week in which certain activities take place?
- 2) Were there activities which occur at one type of school more or less frequently than at others?

3) Were there activities which occurred more or less frequently at certain grade levels than others? What were they?

4) Did the expected frequencies of the occurrence of the activities agree with the outcomes of the study?

5) Did the IMC programs appear to contribute equally to conditions of cooperation, independence, and success as indicated by the observation model? If not, which condition did the IMC appear to contribute most substantially to?

6) Which activities which were expected to occur did not? What caused the discrepancy?

7) How might the observation instrument be further refined?

8) Were there indicators of conditions that need to be redefined?

Physical Description of the IMC

A portion of the study involved a description of the physical setting of the IMC. The description was designed to investigate conditions being studied: positive atmosphere, feeling of value/acceptance, and being challenged.

Questions generated were as follows:

1) Did the IMC contain or have access to materials which would be appropriate for a variety of learning styles and levels?

2) Was there easy access within the IMC? Were books on shelves of a suitable height for reaching? Was the card catalog conveniently located? Was the card catalog low enough so that primary

grade students could use it if they so chose? Were audiovisual materials located in a manner and place which would encourage student use?

3) Was there evidence of student contributions to the IMC such as displays, student work, and the like?

4) Was there evidence of a focus on concrete IMC experiences, such as those which focused on the senses -- feel, smell, sight, hearing? Eg. - rocks, furry animals.

5) Was the IMC decorated in a manner that would encourage visitation and use? Eg. - colors, decorations, comfortable furniture, carpeting, plants.

Student Interviews

The student interviews were designed to further investigate what had been observed, and to focus specifically on the following conditions being studied: cooperation, challenge, independence, success, feeling of value/acceptance, positive atmosphere.

Questions generated were:

- 1) How did students feel about using the IMC?
- 2) Were there any major differences in responses by grade level? By sex?
- 3) What did students like best about the IMC?
- 4) Did students interviewed in the upper grades go to the IMC more often than lower grade students who were interviewed?
- 5) Was there a difference by grade level in the manner in

which students used the IMC? Eg. - Did upper grade students go more independently while third graders went as a class?

6) Were there differences in preferences of activities within schools by grade?

7) Were there restrictions imposed by grade level?

8) Did students in lower grades report fewer successes in finding what they looked for than intermediate grade students?

9) Did students perceive differences in roles between the media specialist and the aide?

10) What did students of all levels agree on?

11) Where were there differences among students?

Media Specialist Interviews

Media specialist interviews were designed to focus on all conditions of self-concept being studied, namely cooperation, independence, success, challenge, feeling of value/acceptance, and positive atmosphere. The broad questions generated were:

1) How similar was the philosophy of the three media specialists? What was that philosophy? How did the physical setting reflect it?

2) What was the perception of the media specialists concerning abilities of students? Focus of IMC? Developing independence in children? Success?

3) Were IMC activities designed to promote cooperation?
Independence?

Diary

Diary information was used to collect data relating to all conditions of self-concept being studied, namely cooperation, independence, success, challenge, feeling of value/acceptance, and positive atmosphere. The questions generated were:

- 1) Was there a difference by primary or intermediate as to independence? Group utilization?
- 2) What unique features existed by type of IMC? What might these differences be attributable to?
- 3) What commonalities were there among IMCs?
- 4) Were there examples of indicators for all conditions studied?
- 5) Were there observed differences in use by sex? Grade level?
- 6) What type of interaction was there between the student and the media specialist? Amongst the students themselves?
- 7) How did others -- aide, adult volunteers, student assistants -- support the IMC program?
- 8) Were there differences which occurred depending on the day of the week?
- 9) What patterns were evident?

Definitions

Most of the following terms have accepted educational

definitions. They were defined for this study in the following manner:

Elementary school - a school containing grades K-5, 1-5, K-6, or 1-6 or any subgroup of this range of grades.

Independence - the opportunity for the child to become dependable, to develop desirable social habits in a natural social situation, to exercise self-control, to develop initiative and creative ability, to follow his/her interests and creative abilities, to broaden his/her interests, and to practice skills.

Instructional Media Center (IMC) - a modern school library which centralizes, organizes (catalogs), and manages the utilization of print and audiovisual resources, with the necessary equipment and a certified media specialist to work with students and teachers.

Instructional Media Center Program (IMC Program) - the activities and services provided to the students, teachers, administrators and community by the instructional media center and its staff.

Instructional Media Specialist - a person with appropriate certification and broad professional preparation, both in education and media, with competencies to carry out a media program. The media specialist is the basic instructional media professional in the school media program.

Interest Center, Area, or Table - an area or areas in the IMC which is changed from time to time, and focuses on subjects designed to stimulate natural curiosity, individual learning, and personal growth in students. The interest center is usually made of print

and/or audiovisual materials, may feature realia, and may focus on holidays, classroom units, or other topics.

Intermediate Level - students in grades 4-6.

Primary Level - students in grades K-3.

Self-Concept - the person's total appraisal of his/her appearance, background and origins, abilities and resources, attitudes and feelings which culminate as a directing force in behavior.

Delimitations

The descriptive nature of observational research and the lack of experimental controls created the most prominent limitation. The results of this study could not be generalized beyond public elementary schools in Wisconsin which met the specifications indicated in the sample selected. The hypotheses generated by this descriptive study would have to be tested experimentally wherever possible.

The observational method employed might have been biased by the observers' backgrounds and expectations. Several techniques to insure observer agreement and reliability were utilized. The investigator's personal bias and observers' biases have been provided and clearly explained.

As in an experimental design, other influences not described within the study may have affected the results.

Organization of the Dissertation

Chapter Two reviews the literature on the areas of self-concept, learning theory, and education and self-concept. In Chapter Three the methodology of the study is discussed. The research design and methods are outlined, and procedures are delineated. Chapter Four presents the results of the study. In Chapter Five the data are summarized, hypotheses are suggested, and future implications are discussed.

CHAPTER TWO

REVIEW OF THE LITERATURE

The review of literature is divided into three main areas, the area of self-concept, the area of learning theory, and the area of education and self-concept. This procedure has been followed because it is this researcher's belief that a background in the general areas of self-concept and learning theory is necessary before one can focus on the more specific area of the possible effect of the instructional media center (IMC) program on a child's self-concept. The review of the literature in the area of education and self-concept then, begins the more specific look at the focus of this study.

The area of self-concept is divided into three subsections: descriptive history of self-concept theories, social theories, and significant others.

The area of education and self-concept is divided into six subsections: the teacher and self-concept, goal structures in schools, mental health, factors contributing to self-concept, IMC goals and education goals, and aims of the IMC program in relation to conditions of self-concept.

Self-Concept

This section of the literature review will highlight major theorists in the area of self-concept in a chronological sequence; self-concept and social theories; self-concept and significant others.

Major Theorists in Self-Concept

La Benne and Greene state: "Self-concept as a determinant of human behavior is not a recent theoretical formation . . . From the earliest recorded history of man there is evidence that he has sought to understand the causes of his conduct" (1969, pp. 1-2).

One of the earliest emphases on theories of self is attributed to René Descartes by Purkey (1970). Purkey indicated that a turning point in a human's thinking about the non-physical self came in 1644 when Descartes wrote Principles of Philosophy. According to Purkey, Descartes placed emphasis on doubt as a principal tool of disciplined inquiry. Between 1644 and the early 20th century, philosophers of the period added ideas about the mystery of the non-physical aspect of humans (Purkey, 1970).

There is wide agreement (Coopersmith, 1967; Fitts, Adams, Radford, R. Thomas, M. Thomas, Thompson, 1971; La Benne and Greene, 1969; Purkey, 1970) that modern theories about the self-concept began with William James' historic book, Principles of Psychology, published in 1890. Although James did not devote himself "extensively or specifically to specific origins of self esteem" (Coopersmith, 1967, p. 29), from James came a view of self which incorporated feelings and

attitudes along with a principal of causality (La Benne and Greene, 1969). According to Coopersmith (1967), James concluded that human aspirations and values have an essential role in determining the favor with which people regard themselves. James further stated that achievement is measured against aspiration, where areas which are valued assume particular significance. Another source of self-esteem which Coopersmith attributes to James is the value placed upon extensions of the self. La Benne and Greene (1969) state that James considered ego to be the individual's sense of identity. In addition to this global concept, James felt that self included spiritual, material and social aspects. James is credited with describing the infant as not having "a self" at birth (Fitts et al., 1971, p. 12).

Beginning in the early 1900's, Freud is credited with providing a "milestone in the question for understanding internal processes" through his "voluminous writing" (Purkey, 1970, p. 3). Purkey, along with La Benne and Greene (1969) credit Freud with giving attention to the self through the concept of ego development and functioning. Of great importance to Freud and Freudian psychologists, according to Purkey (1970), was unconscious motivation.

Beginning in the late 1920's and continuing into the 1950's, emphasis was placed on the theoretical formulation of social psychologists including Alfred Adler, Karen Horney, and Harry Stack Sullivan, who considered the origins of self-esteem (Coopersmith, 1967). According to Adler, a person constructs his own personality out of "the raw material of heredity and experience" (La Benne and Greene,

1969, p. 15). Sociopsychological theorists emphasize that the person's most important motivations are acquired from that person's socio-cultural situation (La Benne and Greene, p. 15).

One of the most highly regarded self-concept theorists is George H. Mead, who wrote Mind, Self, and Society, published in 1934. According to Coopersmith (1967), Mead and James provided the most cogent general formulations of antecedents of self-esteem. Mead's theory proposed that a person would conceive of himself in the ways he believed significant others saw him. Thus, Mead emphasized social interaction as an integral part of the development of self-concept (Fitts et al., 1971). Purkey (1970) described Mead as the exception to the general decline of emphasis on the self which occurred during the first half of the 20th century.

Among American psychologists impressed with the quest for identity was Gordon Allport, whose book Personality: A Psychological Interpretation was published in 1937. According to La Benne and Greene (1969), Allport saw the ego, or self, as a function of the personality, and was among theorists including Eric Fromm, who emphasized that a person's motivations were acquired from socio-cultural situations.

According to Coopersmith (1967), in Fromm's books published in 1941 and 1947, Escape from Freedom and Man For Himself, respectively, Fromm looked at characteristics such as seeking independence or security of the group, forming love relationships marked by understanding and mutual respect, carrying on love relationships

marked by understanding and mutual respect, creativity, and individual expression as formed by social conditions and marked by acceptance, respect, concern, freedom of expression and independence. According to Coopersmith, these characteristics have been theoretically related to self-esteem.

The person credited with popularizing the term self-actualization in behavioral science is Abraham Maslow (Fitts et al., 1971). In writings as early as 1943, Maslow suggested that in any theory of human motivation, that practically all organism states are to be understood as motivating and as motivation. He theorized that all people had the following needs in hierarchical order: physiological, safety, love, esteem, and self-actualization. Of particular importance to this study is the area of esteem, which Maslow divided into the following categories:

- 1) desire for strength, achievement, confidence, independence and freedom.
- 2) desire for reputation or prestige, attention, recognition, importance.

Fitts et al., further note that in Maslow's book Toward a Psychology of Learning (1968, 2nd edition), Maslow indicated that in the normal development of a healthy child, that much of the time, if the child is given a free choice, the child will choose what is best for that child's growth.

Maslow's area of self-esteem, in his hierarchy of needs, is the final prerequisite which he listed for self-actualization. He proposed that the need for self-actualization, the drive to become

what one is capable of becoming, is a basic force which motivates and influences much of a person's behavior. Thus, Maslow emphasized maximum development of human potential, making the concept of self-actualization central to the field of humanistic psychology (Fitts et al., 1971).

With the 1950's came the "self theory" of Carl Rogers (Purkey, 1970, p. 4). Rogers' system of psychotherapy was built around the importance of the self in human adjustment. He viewed the self as the central aspect of personality, and of central importance to an individual's behavior and adjustment, developing out of interpersonal relationships and striving for consistency (Purkey, 1970). Rogers theorized that the fully functioning person was characterized by self-regulation and self-direction. He saw the effective individual as one whose total value process to guide that person toward satisfaction, self-actualization, and adequate behavior. According to Fitts et al., "Clearly, Rogers conceptualized awareness of being, or self-concept, as a continuing process" (1971, pp. 69-70).

Supporting the theoretical system or school of Rogers known as self-theory, Combs and Snygg made a notable influence, along with Rogers, in reintroducing the concept of the self into psychology and education. Purkey (1970), indicated that in Combs' and Snygg's 1949 book Individual Behavior, they proposed that the basic drive of the individual is the maintenance and enhancement of self. Combs and Snygg further declared that all behavior, without exception, is dependent upon the individual's personal frame of reference.

According to Fitts et al. (1971), Combs and Snygg labeled the total self as experienced by the individual, the phenomenal self. "This phenomenal self is the self as observed, experienced, and judged by the individual himself. The sum of all these awarenesses or perceptions is his image of himself -- his self-concept" (Fitts et al., 1971, p. 14). According to Purkey (1970), "Combs' and Snygg's insistence on giving major importance to the ways people see themselves and their worlds was a significant contribution to psychology and education" (p. 6).

Regardless of the specific focus of the previously listed theories of self-concept, all theorists cited agreed that people must know and understand themselves. According to Fitts et al. (1971), behavioral scientists, sociologists, psychiatrists, theologians, philosophers, educators, anthropologists, and psychologists have increasingly come to view the self-concept as a kind of central construct for the understanding of people and their behavior. Today, according to La Benne and Greene (1969), scientific "self-psychology" considers self-concept as a hypothetical construct inferred from behavior (pp. 1-2). Quandt (1972) agreed with the notion that self-concept is a construct (p. 11). Finally, La Benne and Greene (1969) indicate that perceptual psychology now accepts the idea that feelings and beliefs which one holds about oneself motivate that person's concept: "the antecedent for individual responses is the self-concept" (p. 2).

This review does not purport to be an exhaustive one, for the

focus was on major concepts of self-concept. To present further documentation would detract from the specific focus on this study, for the professional literature is filled with thousands of studies and theoretical articles which relate to this topic. In order to provide a base of knowledge in the general area of the self-concept, the historical emphasis on the self-concept from Descartes in 1644 to modern day theorists has been traced. Most studies and research on self-concept in educational settings rely on the theorists who have been introduced.

Self-Concept and Social Theories

This section in the literature review provides an introduction to the relationship of self-concept to social theories. It begins a closer look at social relationships, which are an important part of schooling.

La Benne and Greene (1969) stated that "the self-concept is built or achieved through accumulated social contacts and experiences with other people" (p. 13). They cite studies by Martire and Steiner which show a positive relationship between self-concept and social adjustment, and indicate that other researchers report similar effects of the self-concept on learning and behavior.

Of a similar nature to La Benne and Greene, Coopersmith (1967) stated that the characteristics which are inferred as basic to social independence and originality, i.e., conviction, courage, self-trust and self-respect, presumably stem from the individual's favorable

appraisal of himself. In reviewing Fromm, Coopersmith (1967) noted that those characteristics theoretically related to self-esteem are formed by social conditions such as acceptance, respect, concern, freedom of expression and independence.

Another view of social theory is suggested by Benninga and Meredith (1977) while reviewing Piaget's emphasis on the role of the family in providing the focus through which the child interacts with the environment. Benninga and Meredith compared Piaget's emphasis to Fitts' et al. (1971) theory that self-concept is learned by a person through that person's lifetime of experience within that person's self, other, and realities of the external world.

Aronson, Bridgemen, and Geffner (1977) suggested a view that children could use the classroom to experience and learn prosocial interactions and prosocial behavior. They defined prosocial acts as behaviors that have positive social consequences, and indicated that the development and enhancement of the self-concept is an aspect of prosocial behavior. Aronson et al. further suggested that "it seems likely that the cooperative process would provide a framework for enhancing social development in a structural sense" (pp. 23-24).

Finally, Smith (1969) in looking at stages of achievement motivation, noted that "some degree of autonomous competence is a prerequisite for attention to social comparison and both social comparison and some degree of mature competence orientation that combines with the social orientation" (Smith, 1969, p. 51).

While limited in scope, the section on the relationship of

self-concept and social theories points to the relationship between social interaction and the development of the self-concept. It began the literature review focus on self-concept, socialization, and the role of the school in these areas.

Significant Others

No literature review of self-concept would be complete without a focus on significant others. This section focuses on the role of parents and educators as significant others in the development of the self-concept. It is included because all studies relating to the self-concept must recognize the importance of other people in a person's development of a self-concept. Thus, the theory of significant others, while not the focus of this study, must be noted. It has been described earlier as a major contribution of Mead. As a facilitator of positive self-concept, the role of people in the development of other's self-concept appears to have no equal.

Gordon (1972) indicated that the early years of a child's life are of vital importance in setting the general direction for self-concept. La Benne and Greene (1969) looked at interpersonal theory and concluded that self-concept was built or achieved through accumulated social experiences and contacts. "Self-concept is influenced by the relationships a person has at first with his family and peers in unstructured situations and later in more structured situations with teachers and peers" (p. 17). Aronson et al. (1977) agree and indicate that as far as the source of self-esteem was concerned, the external self-esteem involved the reflection appraisals

of relevant others.

Benninga and Meredith (1977), Fitts et al. (1971), Gordon (1972), La Benne and Greene (1969), Purkey (1970), and Thomas (1973) all offered support for the theory of the importance of the parent in promoting self-concept in young children. Gordon (1972), for example, stated: "Perhaps the most important factor in determining whether or not a child will develop feelings of comfort about himself is the general climate of feeling that exists in the home" (p. 13). In a similar manner, Purkey (1970) stated: "Together, the mother and father are critical in molding and maintaining the child's self-image" (p. 32). He cited the results of five studies which "strongly suggest that a child's behavior is a function of the expectations of others who are significant to him" (p. 32).

In addition to parents, researchers also recognized the role of educators in developing the self-concept of young children. Purkey (1970) said: "Next to the home, the school is the single most important force in shaping the child's self-concept" (p. 40). Gordon (1972) stated: "Upon school entry, the total self is still quite plastic; quite open to change" (p. 18). Other supporters of educators as significant others were Benninga and Meredith (1977), Fitts et al. (1971), La Benne and Greene (1969), Quandt (1972), Rogers (1969), and Thomas (1973). Purkey (1970) and Quandt (1972) place particular emphasis on the relationship of the teachers' attitudes toward the child and the child's self-concept.

Thus, the literature reveals that the self-concept is greatly

influenced by the significant others in the life of the child. While the person or persons who are the significant others are not the focus of this study, it is important that the impact that one person can have on another is recognized.

Learning Theory

The area of learning theory was examined to study its relationship to the development of a positive self-concept. A general look at learning theory is provided in the review of the literature, followed by a discussion of the learning theories of Rogers (1969) and Wilson, Robeck, and Michael (1969).

Gillespie and Spirt (1973) summarized basic principles involving learning which remain unchanged regardless of differences in theories:

- 1) children learn as individuals
- 2) children learn at various rates
- 3) children learn according to different styles and patterns
- 4) education is a continuous process (p. 14)

Matthews' (1976) examination of a learner-centered theory summarized the belief of Morris (1961), who said that learning should be "learner-centered with the educative process beginning with the learner's curiosities and concerns" (p. 16).

The New York Board of Education (1975) extracted the following general principles of learning from Piaget's research:

- 1) the child, especially a young one, learns best from concrete activities.

- 2) each child is different.
- 3) difference in ability is not a major factor in providing the reading, viewing, and listening interests of children and young people.
- 4) the child's thought and language patterns are different from those of the adult.
- 5) it is desirable for a child to have some part in what he learns.
- 6) a child learns from his social experiences.
(pp. 45-46)

Carl Rogers (1969) theorized that there were two kinds of learning -- meaningless learning, as characterized by memorization and irrelevance, and significant meaningful experiential learning. He suggested elements of conventional education as:

- a) prescribed curriculum
- b) similar assignments
- c) lecturing as mode of instruction
- d) standard tests
- e) grades chosen by instructor.

The elements involved in significant or experiential learning, Rogers characterized as:

- a) quality of personal involvement
- b) self-initiated
- c) pervasive
- d) evaluated by the learner
- e) its essence and meaning.

Rogers felt that self-initiated, experiential learning was possible and produced self-reliant learners. His major emphasis was on learning facilitation, and the way that it is impacted by the personal relationship between the facilitator and the learner. Rogers emphasized the teacher's role in building freedom, setting the stage for inquiry by posing problems, and creating an environment responsive to the learner. He viewed the evolution of one's own learning as one of

the major means by which self-initiated learning becomes responsible learning.

Rogers suggested learning principles, including the following:

- 1) human beings have a natural potentiality for learning.
- 2) significant learning takes place when the subject matter is perceived by the student as having relevance.
- 3) much significant learning is acquired through doing.
- 4) learning is facilitated when the student participates responsibly in the learning process.
- 5) creativity blossoms in an atmosphere of freedom. (Rogers, 1969, pp. 3-5, 9, 106, 131-142, 157-162).

Rogers (1969) felt that the qualities which facilitated learning were:

- 1) realness in the facilitator of learning
- 2) caring for the individual
- 3) empathetic understanding. (pp. 109-111)

Rogers felt that by posing the problems, creating an environment responsive to the learner, and giving assistance to the students in the investigative operations, that the teacher is able to set the stage of inquiry (Rogers, 1969, p. 136). Yet, ". . . the only learning which significantly influences behavior is self-discovered, self-appropriated learning" (Rogers, p. 153). Finally, Rogers (1969) stated: "The most socially useful learning in the modern world is the learning of the process of learning, a continuing openness to experience and incorporation into oneself of the process of change (p. 163).

Knowles' (1975) ideas on Self-directed Learning are in agreement with Rogers' (1969) theories. Knowles defined self-directed learning as:

. . . a process where individuals take the initiative, with or without help of others, in diagnosing their learning needs, formulating learner goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. (p. 18)

Knowles (1975) listed immediate reasons for self-directed learning as follows:

- 1) People who take the initiative in learning learn more things, learn better. They enter into learning more purposefully, and with greater motivation. They tend to retain and make use of what they learn better and longer than others.
- 2) Self-directed learning is more in tune with our natural process of psychological development. Independence is needed for maturity.
- 3) Many developments in education - new curriculums, open classrooms, nongraded schools, learning resource centers, independent study and the like, put heavy responsibility on the learners to take a good deal of initiative. Students thus need to know how to be self-directed. (Knowles, pp. 14-15)

Finally, Knowles (1975) ties self-directed learning into the area of self-concept when he says:

Self-directed learning assumes that learners are motivated by internal incentives, such as the need for esteem (especially self-esteem), the desire to achieve, the urge to grow, the satisfaction of accomplishment, the need to know something specific, and curiosity. (Knowles, p. 21)

In summary, a study of theoretical models of learning shows

many in existence. A few learning theories were described. Among others not discussed earlier is the learning motivation model of Wilson, Robeck, and Michael (1969). Their motivation model incorporates behavioral and nonbehavioral theory toward a level of self-actualization. Wilson et al. hypothesize three levels of interaction between cognitive and emotional learning which include: associative or conditional learning, conceptualizations or insightful learning, and creative self-direction. According to Wilson et al., motivation which is related to attitudes, incentives, and developing personality, enables the learner to become self-directive.

Wilson et al. postulated that motivation, like information, is learned. Thomas (1973) supports this theory. Thomas concluded that conceptual analyses of self revealed it to be that of a learned structure which influenced the learning process.

In this part of the literature search, an introduction to learning theories was provided in order to show the existence of theories which supported the relationship of feelings of self to ability to achieve learning at a maximum level. The learning-motivation model of Wilson et al. (1969) hypothesized three levels of interaction between cognitive and emotional learning. Like Maslow's, at its highest level, a student achieved creative self-direction.

Education and Self-Concept

The self-concept theories, social theories, theories of the

role of significant others, and learning theories which have been presented previously, have directly as well as indirectly focused on the role of education in the promotion of the self-concept. The section which follows summarizes the place of education, in general, and the IMC, specifically, in promoting the self-concept in young children.

La Benne and Greene (1969) stated, "There are many influences peripheral to the school which impinge upon the child's self, but we maintain that the school is a major contributing agent to the malleable status of the child's conception of self" (preface). They further indicate that the child's self-concept is not unalterably fixed, and is modified by early experiences, including those in the classroom, at least through the maturing years. Thomas (1973), too, agrees that the process of developing an adequate self-concept is influenced by school experiences. Benninga and Meredith (1977) indicate that it is because the child responds to cues from others that the child's self-image can be enhanced by classroom experiences in positive ways.

Ruth Davies (1974) examined developments which she felt were shaping and directing educational change. Among the developments were:

- 1) greater emphasis on humanizing and individualizing instruction
- 2) greater emphasis on learning how to learn
- 3) greater emphasis on the importance of thinking as a lifeskill
- 4) greater emphasis on learning in the affective domain

- 5) greater emphasis on the open school and the open classroom
- 6) greater emphasis on the planned and systematic use of media to improve instruction.
(preface)

Davies saw similar innovative practices developing including:

- 1) the open classroom concept of teaching and learning
- 2) teaching geared to individuals
- 3) teaching and learning emphasizing discovery, inquiry, problem solving, comprehension and utilization
- 4) teaching and learning embracing the affective area
- 5) creative inventiveness in teaching and learning
- 6) classroom teaching as a cooperative team enterprise. (p. 14)

Davies (1974) described, in part, humanistic education. Cagan (1978) focuses on humanistic education and says: "an educational program that has as its goal humanistic interaction cannot ignore the relationship between schools and society . . . Education at once reflects and supports existing social relationships" (Cagan, 1978, p. 242). Of a similar opinion, Aronson, Bridgemen, and Geffner (1977) promoted the advantages of the classroom in providing the child the opportunity to experience and learn prosocial interactions and prosocial behavior.

Thus, there is support for the role of the school in contributing to a child's self-concept. Although the area of the affective domain receives some attention, this researcher has found that parents and other adults are consistently concerned with the academic achievements of children. Yet, there appears to be a connection between academic achievement and feelings about self. Purkey (1970) and

La Benne and Greene (1969), among others, provided evidence that the self-concept does affect academic performance. For example, Purkey (1970) said the following about research data: "It does stress a strong reciprocal relationship, and gives us reason to assume that enhancing the self concept is a vital influence in improving academic performance" (Purkey, 1970, p. 27).

According to Bocian (1976), "An impressive number of studies report a significant relationship between self-concept (variously measured) and academic achievement" (p. 14). She cites Leckey as being one of the first to report that low academic achievement was often because of a child's definition of himself/herself as a non-learner.

One of the most recent, comprehensive studies validating the positive relationship between self-concept and achievement cited by Bocian (1976) is that of Katzenmeyer and Stenner, who found, after administering the Self Observation Scale (SOS) to more than 3,000 fourth, fifth and sixth grade children that six of the seven SOS scales were shown to have a positive and significant correlation to reading achievement. Thus, there is strong evidence to support the significant relationship between self-concept and academic achievement.

Teacher and Self-Concept

Many self-concept studies examined from the educational viewpoint continuously focus on the role of the teacher in the promotion

of the self-concept in students. Pullias and Young (1969), Purkey (1970), Thomas (1973), and Wilson et al. (1969) provide examples of this emphasis on the teacher. Wilson et al. (1969) state: "Self-concepts are learned in rather well-defined ways, most of which are largely under the control of the teacher, should he wish to exert himself to make changes in these personality structures" (p. 12). Pullias and Young (1969) saw the teacher as fostering creativity by providing the atmosphere and guidance to help students find satisfaction in their creative work and that of others.

In summary, the literature shows support for the notion that the positive self-concept is important in promoting the development of desirable social skills, in promoting maximum academic success, and in encouraging freedom and creativity. The teacher, through classroom experiences, is able to affect change in the self-concept of students, either of a positive or negative nature.

Goal Structures in Schools

In addition to a focus on the influence of the teacher, much has been written on the effect of public school institutions on the developing child's self-concept. The literature is primarily divided into information about atmospheres inducing cooperation, and those which induce competition. According to Bryan (1975), during the past decade, research on the development and correlates of helping and cooperative behavior has been abundant.

Johnson and Johnson (1974, 1975) are noted authorities on

instructional goal structures in classrooms. They indicated four possible goal structures which could be implemented in a learning situation: competitive, cooperative, individualistic, and no structure. They provided evidence which showed that the process by which students learn and the outcomes of learning were largely determined by the goal structure implemented by educators. Because analysis of research studies show the cooperative goal structure to be the best in most affective and cognitive learning situations, Johnson and Johnson (1974) devote themselves primarily to the cooperative goal structure. Based on their analyses, the following were found:

- 1) The use of cooperative goal structures within learning situations may be crucial to cognitive development of students, the reduction of egocentrism necessary for social development, ability to communicate effectively, empathize, and make autonomous moral judgments based on mutual reciprocity and justice. (p. 222)
- 2) Cooperative goal structures encourage positive interpersonal relationships characterized by mutual liking, positive attitudes toward each other, mutual concern, friendliness, attentiveness, feelings of obligation to other students, and desire to win respect of other students. (p. 228)
- 3) Cooperative goal structure should be used when instructional objectives focus upon such cognitive and affective outcomes as empathetic ability, positive attitudes toward subject areas, instructional activities, teachers and other students, development of positive self attitudes and a belief in one's basic competence and worth, development of behavior based on intrinsic motivation.

- 4) The use of a cooperative instructional structure will implicitly teach respect for and the value of differences among individuals.
- 5) Almost all instructional activities should take place in a cooperative goal structure.
- 6) Since every group member contributes in some way to accomplishing the goal, all individuals in a cooperative structure potentially will have a success experience. (pp. 230, 223, 232)

Johnson and Johnson (1975) studied goal structures where cognitive outcomes were desired, and found that overwhelmingly, the cooperative goal structure was best. Areas included:

- 1) retention, application, and transfer of factual information, concepts, principles
- 2) mastery of concepts and principles
- 3) verbal abilities
- 4) problem-solving ability and success
- 5) creative ability: divergent and risk-taking, thinking, productive controversy. (p. 32)

In a similar manner, Johnson and Johnson (1975) studied goal structures where affective outcomes were desired and found that, in all cases studied, the cooperative goal structure was best. Areas included:

- 1) pluralistic, democratic values
- 2) valuing education
- 3) positive self attitudes
- 4) enjoyment and satisfaction from learning
- 5) emotional capacity. (p. 25)

Other researchers provided extensions of the premise of goal structures. La Benne and Greene (1969), for example, reported the findings of Lewin, Lippitt, and White published in 1939. They demonstrated the superiority of democratic procedures in the development of

individual responsibility, satisfying social relationships, constructive and friendly channeling of aggression, maintenance of work interests, and the ability to continue work activities in the absence of the teacher's prodding. This democratic atmosphere resulted in more constructive group activity, more cooperation among class members, and greater opportunity for the development of self management by students.

Bryan (1975), Johnson and Johnson (1974, 1975), and Purkey (1970) cited American education's tendency to program students for failure and to encourage competition. Purkey (1970) said, for example, "Schools can sometimes be the enemy, distributing failure and defeat to the very children who need to experience success the most" (p. 41). Johnson and Johnson (1974) cited studies that showed "that American students so seldom cooperate spontaneously on the experimental task that it appears that the environment provided for these children is barren of experiences that would sensitize them to the possibility of cooperation" (Johnson and Johnson, 1974, p. 217). Bryan (1975) agreed, and after looking at studies in the area of children's cooperation, concluded:

It would seem reasonable to assume that preschool age children are initially socialized with a view to developing their cooperation with others. As the child develops, the socialization emphasis may well change toward greater stress or achievement of individual skills. For older children, when there is opportunity to compete or cooperate, they compete. (p. 135)

The researcher agrees with Johnson and Johnson (1975) that a number of educators, including herself, challenge the notion that failure "must be an inevitable part of American education" for a large proportion of students (Johnson and Johnson, 1975, p. 198).

Although Johnson and Johnson devoted most of their energies to the cooperative goal structure, they also did research on the competitive goal structure. A look at the competitive goal structure by Johnson and Johnson (1974) provided the following:

- 1) competitive goal structures have a negative effect on interpersonal relations among students. (p. 228)
- 2) The traditional use of interpersonal competition, like most traditions, is supported by several myths:
 - a) that our society is highly competitive and a student must be able to function in such a world,
 - b) that achievement, success, drive, ambition, and motivation depend upon successfully competing with other persons,
 - c) that competition builds character and toughens the young for life in the real world,
 - d) that children prefer competitive structures.
 All have been disproved.
- 3) Higher levels of anxiety and a more continued state of anxiety can be expected to be found in competitive structures as the risk of failure to accomplish a desired goal or reward may be higher. Losing may result in a decrease in self-esteem and may promote anxiety concerning one's behavior. (Johnson and Johnson, 1974, pp. 217-219, 227)

Finally, Johnson and Johnson indicate that, until it is demonstrated empirically that the pervasive use of competition does not

result in damage to the person's self attitudes, students should be informed of what goal structure is to be used within instructional activities and participate in competitively structured situations only on a voluntary basis.

In addition to Johnson and Johnson, Cagan also looked at the areas of cooperation and competition. Cagan (1978) presented a somewhat more radical view of cooperation and competition. Based on her research, she suggested:

- 1) A decent and just social order, one allowing each individual to achieve self determination and self actualization, can be built only if individualistic models of social relationships are replaced by more communal or collective ones.
- 2) American individualism generates competitive, egotistic, and atomized social relationships.
- 3) If children are discouraged from examining issues and ideas openly and critically, conformity to authority rather than reasoned consideration will become the basis for moral judgment.
- 4) Group experiences built around individual competition are inimical to the development of cooperation and concern for others. (pp. 228, 246, 250)

In summary, educational institutions, through their promotion of cooperation or competitive goal structures, affect student achievements in cognitive and affective areas. This is well supported by the extensive research of Johnson and Johnson (1974, 1975), who related the results of studies of cooperative and competitive goal structures to student achievement on a cognitive and affective area.

Mental Health

Throughout the literature cited previously, a common inference has been in the area of good mental health. A closer examination of the area of good mental health follows. This examination focuses on the views of noted theorists cited earlier in relation to the self-concept.

Rogers (1969) described the fully functioning person as an educational goal:

The person who emerges from a theoretically optimal experience of personal growth whether through client-centered therapy or some other experience of learning and development, is then a fully functioning person . . . He is a fully functioning organism and because of the awareness of himself which flows freely in and through his experiences he is a fully functioning person. (p. 288)

In a similar manner, Fitts et al. (1971) summarized the focus of humanistic psychologists when they said, "All are agreed . . . that fully functioning people are happier, more productive, and more efficient and that they more effectively develop their potentialities" (pp. 6-7).

Wilson et al. (1969) tie good mental health with self worth. They say, "One of the most important ingredients of good mental health is the individual's feeling that he is a worthy person" (p. 392). They see the schools as the most visible and available means of making mental health improvement possible, and feel that one of the best ways schools can help people meet school stress is by helping them become creative, self-directing people. Through so

doing, students will find life more worthwhile.

Finally, Maslow (1968) described healthy people as having clinically observable characteristics, which include:

- 1) increased acceptance of self, of others, of nature
- 2) increased spontaneity
- 3) increase in problem centering
- 4) increased autonomy and resistance to enculturation
- 5) greatly increased creativeness. (pp. 25-26)

Thus, the area of good mental health is seen as being related to the development of a positive self-concept.

Factors Contributing to Self-Concept

Factors contributing to self-concept were examined, because this study emphasizes the atmosphere or environment conducive to the development of a positive self-concept. Coopersmith (1967), Purkey (1970), and Quandt (1972) were found to have the most comprehensive listing.

Coopersmith (1967), as a result of his comprehensive studies, identified four factors contributing to the development of self-esteem:

- 1) amount of respectful, accepting and concerned treatment that an individual receives from the significant others in his life;
- 2) history of successes and the status and position we hold in the world;
- 3) experiences which have been interpreted and modified in accord with the individual's values and aspirations;
- 4) individual's manner of responding to devaluation. (p. 37)

Of particular emphasis to this study is the history of success.

Here, Coopersmith defined four experiences as indicating success:

- 1) power - ability to influence and control others;
- 2) significance - acceptance, attention, and affection of others;
- 3) virtue - adherence to moral and ethical standards;
- 4) competence - successful performance in meeting demands for achievement. (p. 38)

Purkey (1970) named the following six factors which seemed particularly important in creating a classroom atmosphere conducive to developing favorable self-images in students:

- 1) challenge
- 2) freedom
- 3) respect
- 4) warmth
- 5) control
- 6) success. (pp. 50-56)

Quandt (1972) indicated that a classroom atmosphere can be conducive in developing favorable self-concepts in children. He named the following informal observations of five types of behavior giving an indication of self-concept:

- 1) comments (negative or positive)
- 2) reactions (facial expressions, body movements)
- 3) interactions
- 4) volunteering of answers
- 5) confidence. (pp. 11-13)

Based on a summary of self-concept studies, Quandt further listed the following correlates of self-concept:

- 1) past experiences
- 2) counteractions (reaction of child to how he perceives those people who are significant view him)
- 3) self-concept reinforcement

- 4) spiraling process (e.g., poor self-concept interferes with learning to read and resulting reading disability leads to an ever poorer self-concept).

Quandt suggested the following four types of conditions promoting a positive self-concept:

- 1) establishment of a positive atmosphere
 - 2) making child feel accepted
 - 3) providing child with success
 - 4) encouraging a positive environment at home.
- (pp. 13-31)

Other persons concerned about factors contributing to self-concept included Fitts et al. (1971), Gordon (1972), Knowles (1975), La Benne and Greene (1969), Maslow (1943, 1968), and Rogers (1969).

Looking at factors contributing to self-concept in terms of how teachers could help, Gordon (1972) said:

- 1) be yourself - be honest
- 2) set realistic expectations
- 3) provide for productive and creative work
- 4) provide a variety of stimuli
- 5) trust children
- 6) provide for immediate feedback
- 7) enhance cultural respect
- 8) handle discipline
- 9) have communication between the school and the home. (pp. 29-36)

La Benne and Greene (1969) also looked at what teachers should do. They suggested that:

- 1) teachers must be honest
- 2) teachers must help child select experiences which provide a challenge while maximizing opportunities for success
- 3) teachers should not make predetermined decisions
- 4) teachers remember that students become what they are thought to be. (pp. 27-30)

Fitts et al. (1971) provided the following three factors which are said to influence the developing self-concept:

- 1) experiences, especially interpersonal experiences, which generate positive feelings and a sense of value and worth
- 2) competence in areas valued by the individual and others
- 3) self-actualization, or the implementation and realization of one's true personal potentialities. (p. 38)

Knowles (1975) described the climate most conducive for self-directed learning as:

- 1) warm climate of mutual caring
- 2) mutual respect
- 3) climate conducive to dialog
- 4) climate in which roles are clear and persons are secure in those roles
- 5) mutual trust. (pp. 9-10)

Maslow (1943) described the observable factors of curiosity, exploration, desire for facts, and desire to know. Later, Maslow (1968) discussed the normal development of the healthy child, and indicated that much of the time, if the child is given a "really free choice" (p. 198), that the child will choose what is really good for his growth. He further indicated that for children to grow well that adults must have enough trust in them and in the natural processes of growth to let them grow in a "Taoistic rather than an authoritarian way" (p. 199).

Finally, Rogers (1969), by describing qualities which facilitate learning, also described factors influencing self-concept. Those qualities were:

- 1) realness in the facilitator of learning
- 2) prizing, acceptance, trust, caring for the individual
- 3) empathetic understanding.

Thus, not only have researchers identified factors in the school setting which can promote the development of a positive self-concept, but researchers have suggested specific ways that teachers and others can promote a positive self-concept, and in this way, facilitate learning.

Goals of Education and Instructional Media Centers

Literature abounds with information on the goals of education. Shavelson, Hubner, and Stanton (1976) indicated that "Historically, education goals have tended to fluctuate from emphasis solely on cognitive outcomes to major concern with social and affective ones" (p. 407). They noted that the current trend seems to be moving from cognitive outcomes to an emphasis on humanistic aspects of education. Shavelson, Hubner, and Stanton (1976) cited the sharp increase in the number of studies on self-concept "as one reflection of the re-emphasis on noncognitive outcomes of education" (p. 407).

Davies (1974) looked at the affective and cognitive needs of learning and suggested that neither area should eclipse the other, but that the areas should work together to nurture and enhance the other. "The goal of educational excellence must encompass the total man - his mind, his body, his heart, his spirit, and his soul. Intellectual excellence coupled with personal excellence is the ideal whose time has come" (p. 15).

Gillespie and Spirt (1973) said:

The aims of American education are usually expressed in terms of a dual responsibility to society and to the individual. The societal aims involve not only the preservation of those important values accumulated through time but also provisions to insure growth and change in society. Education also attempts to equip the individual with knowledge to fit into the existing society and to contribute to that society's betterment. (p. 14)

The New York Board of Education (1975) writes its goals as:

to become meaningful to young people and to arouse their curiosity and interest in learning, the process of education must:

- contribute to their lives
- prepare them to accept new ideas
- give them the opportunity to look for and discover answers by themselves
- help them to evaluate possible solutions and select the most useful
- encourage them to extend their inquiry to the limit of their interest and potential. (p. 89)

A comprehensive view of goals of education is provided by the Wisconsin Department of Education (1972). The Wisconsin Goals of Education are:

SELF-REALIZATION

Schools of the future will exercise a more concerted effort to aid each child to develop a feeling of self-worth and confidence which will him/her to experience a sense of pride and accomplishment in a highly technological, rapidly and dramatically changing society. The individual should develop a positive self-image within the context of his/her own heritage and within the larger context of the total society.

The student shall:

1. know and respect himself/herself.
2. recognize his/her strengths and limitations in setting personal goals.

3. develop his/her interests and potentials in order to achieve those personal goals.
4. have insight into one's own value structure, how values affect one's life and relationship with others.

HUMAN RELATIONS

Human relations is the interaction of individuals with one another and with groups. Schools cannot ignore human relations, because (by means of their social systems, organizational structures, teaching methods, and administrative practices) they teach it whether consciously or not. Schools shall foster an environment where students, all school personnel and other community members interrelate to seek self-knowledge and understanding, appreciation, respect and concern for all human beings.

The student shall:

1. understand, appreciate and respect one's self.
2. have a desire to contribute to the well-being of society in all areas of his/her life and place a higher value on people than things.
3. understand and appreciate the value systems, cultures, customs and history of his/her own heritage as well as those of others.
4. possess the skills and attitudes necessary to assure the continuing development of:
 - a. respect for the rights of one's self and others.
 - b. the ability to form satisfying and responsible relationships with a wide variety of people.
 - c. skill in group relations.
 - d. the ability to initiate and maintain personal friendships.
 - e. a recognition of the political, social and cultural interdependence among peoples of the world.
 - f. an understanding of the various domestic and international life styles.
 - g. the ability to manage conflicts in values.

- h. respect for the work efforts of one's self and all others.

BASIC SKILLS

Schools are a significant agency of society for the development of basic skills. It is essential that a person be able to interact within a changing society and make reasonable judgments about it. To that end, schools must explore and implement the best possible ways for students to acquire and apply the fundamental skills necessary to learning.

The student shall:

1. comprehend ideas and facts through reading, viewing and listening.
2. communicate ideas and facts through writing and speaking.
3. use the processes of language, science and mathematics.
4. perform psychomotor (mental-physical) activities necessary to learning.
5. use problem-solving techniques and processes used in decision-making.

MENTAL AND PHYSICAL HEALTH

The insistence that our youth develop sound minds and bodies must be a continuing value of a renewing society. Children come to school with different mental and physical capabilities. Schools shall develop self-concepts and physical skills in accordance with each child's potential.

The student shall:

1. have the basic physical and mental health necessary for his/her optimum growth and development.
2. understand the emotional and social aspects of human sexuality.
3. understand the interrelationship of mental and physical health.
4. have an awareness of and an incentive to use community resources essential to assure his/her optimum mental and physical health.
5. recognize leisure time activities as a vital part of human life, and possess sufficient skill and interest in an area of activity other than that of his vocational choice to be able to make constructive use of leisure time.

6. demonstrate knowledge, use and appreciation.
7. possess knowledge concerning the various body systems and how they are affected by dietary habits, physical and mental activity, drugs, alcohol, tobacco, and poisons.

CAREER EDUCATION AND OCCUPATIONAL COMPETENCE

In a rapidly changing society where occupations change, appear and disappear, means must be found to equip students to deal with the world of work. Schools must offer students an education that prepares them for alternative occupational, academic and technical programs beyond high school.

The student shall:

1. have a respect for the dignity of all occupations and the desire to pursue a satisfying vocation.
2. have acquired a knowledge and understanding of opportunities open to him/her for preparing for a productive life.
3. have developed those occupational competencies consistent with his/her interests, aptitudes and abilities which are prerequisite to entry and advancement in the economic system and/or academic preparation for acquisition of technical or professional skills through post-high school training.

CULTURAL APPRECIATION

Harmony among peoples of the world requires appreciation and understanding of diverse cultures. Students shall have opportunities to learn about various cultures and to deepen their appreciation of their own heritage. The art forms of a people communicate much that is necessary to know about their culture. In order to heighten this kind of understanding, students should have opportunities to express themselves in a variety of artistic ways.

The student shall:

1. have an appreciation of art, crafts, music, literary and dramatic forms, and their place in the historical and cultural heritage of this and other nations.
2. have the experience and skills necessary for the creative use of leisure time.

3. have an awareness of the importance of and the use of cultural and recreational facilities in his/her community.

LIFELONG LEARNING

Life expectancy is such that the average individual has many productive years beyond his formal school years. At the same time, the world is changing at an ever-increasing rate, constantly requiring new approaches. It is therefore imperative that an individual be prepared to participate in a life-long learning experience.

The student shall:

1. be responsive to the needs and opportunities to learn afforded by an ever-changing social, economic and political environment.
2. have knowledge of the possibilities for continuing self-development in light of increasing educational and leisure time opportunities.

CITIZENSHIP AND POLITICAL UNDERSTANDING

Citizenship is the quality of an individual's response to membership in the community of the locality, state, nation and world. Because schools are a part of society and because ours is a society based on the premise that people are able to govern and direct themselves through law, it is important that the total school experience offer opportunities for students to learn and practice their roles, rights, and responsibilities within legitimate government.

The student shall:

1. understand the structure, governance and governmental heritage of society (communities, state, national, world).
2. understand the importance of effective participation in fulfilling his/her obligation to society.
3. have developed the skills to participate in a democratic society as a result of his/her total school experience.

ECONOMIC UNDERSTANDING

In the American economic system, students must understand those factors that affect both their own economic condition as well as the standards of living among the

world community. Effective participation in the economy as a consumer and producer of goods and services requires understanding of personal and world economics and the relation of government to economy.

The student shall:

1. learn to evaluate his/her needs, match products to needs and effectively use products and natural resources.
2. understand the various systems of production and distribution, the role and responsibility of the individual in these systems and the ways in which these systems influence the lives of people.
3. understand the relationship between individual consumption of goods and the effect on the environment.
4. understand the process of obtaining employment, planning and budgeting personal income, saving and investing, and financing major purchases.
5. be aware of the agencies which assist and protect consumers and products.
6. be aware of national and international business organizations, monetary systems and the effects of government on their economics.

PHYSICAL ENVIRONMENT

The quality of life and ultimately the question of survival depends upon man's ability to live in harmony with his physical environment. Schools must therefore provide experiences leading to the acquisition of knowledge, skills and attitudes that will enable society to develop a balanced use of natural resources that recognize the concurrent rights of present and future generations.

1. Students shall acquire knowledge and understanding of the social, physical and biological worlds and the balance between man and his environment.

Students shall have:

- a. an understanding of the social economic and political implications of population growth.
- b. knowledge of the basic facts regarding ecological balance and the effect of people, technology and industrialization on altering and maintaining this balance.

- c. developed a comprehension and perspective of the world as an integral ecosystem.
- d. an understanding of how people and technology alter the natural and physical environment.
- 2. Students shall have attitudes and behaviors leading to the appreciation, maintenance, protection and improvement of the physical environment.

Students shall acquire knowledge and skills which enable them to:

- a. improve their personal environment.
- b. discriminate in their producing, usage and purchasing practices in relation to ecological considerations.
- c. be a responsible developer and user of technology.
- d. play an active role in preserving and improving the environment.
- e. engage in environmentally compatible life styles.

CREATIVE, CONSTRUCTIVE AND CRITICAL THINKING

A student must be able to cope with changes affecting the quality of his life. A student must be prepared to apply imagination, creativity, constructive and critical thinking to personal problems and societal conflicts. The school shall provide an environment where students can develop skills of thinking and where experiences can be examined and integrated.

The student shall:

- 1. be able to deal effectively with situations which are new to his/her experiences.
- 2. think and act in an independent, self-filling way and in a considerate and responsible manner toward others.
- 3. have skills in the logical processes of search, analysis, evaluation and abstract thinking.

(Wisconsin's Educational Goals, 1972, pp. 7-10)

Rogers (1969) says: "We are, in my view, faced with an entirely new situation in education where the goal of education, if we are to survive, is the facilitation of change and learning" (p. 104). He suggested that the facilitation of learning is the function which may hold constructive, tentative, changing process answers by which

we learn how to live as individuals.

Finally, Lowrie (1970) suggested these as commonly accepted goals of education at the elementary level:

- 1) broadening concept of the classroom to include all types of living experiences from the family to the international community.
- 2) small group and individual, as well as class, learning activities.
- 3) acceptance of children as they are and provision of materials which takes into consideration their individual differences.
- 4) emphasis on a problem-solving approach rather than memorization.
- 5) acknowledgement of "persistent life situations" of which all children are aware and about which their curiosity increases as they mature.
- 6) education as a lifelong process accepted by children. (Lowrie, 1970, p. 20)

In this section, the generally accepted goals of education were given. The aims of IMC programs as they relate to educational goals follow.

The aims or objectives of IMCs generally support the educational goals of the district. Davies (1974), Freedman (1976), Gillespie (1973), Prostanio and Prostanio (1971), Ward and Beacon (1973), Wood (1976), and standards of the American Library Association and the Association for Educational Communications and Technology (1975) provide examples. Davies (1974) said: "It is the educational program - its philosophy, goals, purpose and objectives - which gives purpose and direction, scope and dimension, form and substance, significance and value to the school library media program" (p. 2).

Media Programs: District and School said: "Quality district and school media programs undergird and extend educational opportunities

by providing the resources for teaching and learning . . ." (1975, p. 105).

A closer look at IMC goals shows an emphasis on the individual. Standards for School Media Programs (1969), Diehl (1978), Gillespie and Spirt (1973), Sullivan (1968), Wisconsin's Standards for Instructional Media Programs, 1977-82 all provide examples of this emphasis. Standards for School Media Programs (1969) says: "The media program is indispensable in the educational programs that now stress individualization, inquiry, and independent learning for students" (p. 3). Diehl (1978) cites Taylor (1972) in saying:

School libraries, from their earliest beginnings in the 1920's, were dedicated to the importance of the individual and to the idea that students should assume responsibility for a considerable amount of their learning. Learners in school library service perceived learning to be a cognitive, affective, and social process and sought library conditions in which all three dimensions are fostered." (Diehl, 1978, Foreword)

Finally, Fischer (1974) says: "The media center, if properly utilized, is a vitally important school learning area that can be of tremendous value in helping children reach the goal of development of the individual child" (p. 155).

Gillespie (1973) and Wood (1976) describe the necessity of school media programs. Gillespie says: ". . . many persons who are involved in education now realize that a sound media program is a pre-requisite for high-quality education" (p. 15). Wood says of media programs in open schools, "within the open space school, the place of materials and media becomes of paramount importance" (p. 205).

Aims of the IMC

When one looks at aims of IMCs, one finds many similarities. The most common aims include creating the right environment, providing materials, meeting curricular needs, meeting personal and instructional needs of students, encouraging creativity, self-fulfillment and inquiry. No two sets of aims are alike, and since the purpose that the IMC has should have a direct affect on its ability to promote self-concept, the overview of aims of the IMC will be a fairly comprehensive one.

Media Programs: District and School (1975) indicates that it is the aim of the facilities of the media center to create an environment that encourages the use of alternative media, that sponsors inquiry, and that motivates every type of student to use the collection and to draw upon media program services.

Media Programs: District and School (1975) further states that:

Programs of media services are designed to assist learners to grow in their ability to find, generate, evaluate, and apply information that helps them to function effectively as individuals and to participate fully in society.

Through the use of media, a student acquires and strengthens skills in reading, observing, listening, and communicating ideas. The learner interacts with others, masters knowledges as well as skills, develops a spirit of inquiry, and achieves greater self-motivation, discipline, and capacity for self-evaluation. With a quality media program a school can challenge its members to participate in exciting and rewarding experiences that satisfy both individual and instructional purposes.

Media programs contribute to the life experience of users and their individual self-fulfillment.

Program evaluation requires continuous identification and appraisal of the contacts or interfacing among users and media program components, so as to determine the degree to which operational design facilitates or blocks the attainment of objectives. Effective media programs satisfy both individual and instructional purposes in a balanced and aesthetically rewarding way. (ALA and AECT, 1975, pp. 4-5)

The following paragraph from Media Programs: District and School illustrates the desire of media programs to meet cognitive and affective needs:

The school media program occupies a unique position in helping students achieve satisfying and rewarding experiences in reading, listening, and viewing and to advance in the use of these literacies. The use and production of media provide substantial means for satisfying and expressing the personal needs and desires of students and enhancing their leisure activities. Reading competencies and growth in visual and aural literacies are essential in achieving these goals, and the media staff works with learners both independently and with teachers in helping to realize these competencies. (ALA and AECT, 1975, p. 15)

Diehl (1978) also notes the cognitive and affective needs that IMCs serve.

Standards for School Media Programs (1969) indicates that:

the student turns to and depends on the media programs for many purposes -- most of them related to curricular requirements but some initiated by other interests and needs. The media center's program, collections, and environment provide a broad spectrum of learning opportunities for large and small groups of students as well as for individual students. The focus of the media program is on facilitating and improving the learning process in its new directions -- with emphasis on the learner, on ideas and concepts rather than on isolated facts, and on inquiry rather than on rote memorization. (ALA and NEA, 1969, p. 2)

Standards for School Media Programs further states that the IMC gives the student opportunities to create and produce materials, and in some instances, the IMC affords the student "his first experience of success and accomplishment" (p. 3). Through its professional staff, the IMC helps students to develop good study habits, to acquire independence in learning, and to gain skill in the techniques of inquiry and critical evaluation. The IMC also assists students to develop competencies in listening, viewing, and reading skills, and guides students in developing desirable reading, viewing and listening patterns, attitudes, and appreciation.

Pearson and Butler's (1969) book, Instructional Material Centers: Selected Readings, notes the provision of materials and assistance for enrichment of curricular offerings in serving the varied interests, abilities, achievements, and maturities of students; helping children grow by generating a desire for expanded learnings; the provision of a climate encouraging creativity.

In addition to previously stated aims of the IMC, Davies (1974) indicates the function of the library media program to humanize the educational program, and to manage knowledge so that learning will become more significant, more meaningful, and more satisfying.

A comprehensive listing of aims and objectives of school media programs is provided by the New York Board of Education (1975):

The philosophy of the school library media programs is based on the belief that an adequate school library media center is the right of every student. As a result of cooperative planning by community

representatives, school administrators, librarians, curriculum specialists, and teachers, the library media center fosters the student's intellectual and social growth by:

Providing a place where he may pursue and expand his interest at his own pace through the medium by which he best learns.

Reinforcing responsibility for self-motivated and self-directed activities.

Providing opportunities for interpreting, communicating, and sharing ideas.

Focusing attention on the acquisition of ideas and concepts from the best books, films, recordings.

Encouraging a spirit of inquiry, exploration, and discovery.

Developing analytical and critical skills using a variety of direct sources.

Becoming an effective force for achieving educational goals and for implementing a flexible and innovative curriculum.

Stimulating an awareness of, and concern for, the problems of a changing society and providing multiple resources for informed and active participation in society's development.

The philosophy of the school library media center affirms a belief in a unified program of audiovisual and printed resources and services in each school community. It supports cooperation between school libraries, audiovisual, and subject departments in the selection, organization, and administration of library resources. It is implemented through a program of individual and group reading, listening, and viewing; of guidance in the selection and use of materials; and of instruction in the location and use of tools for research and personal service. The underlying principle is concern for the individual. The school library media center is a place where one can savor the joy and excitement of reading, listening, and viewing; where one has the opportunity to grasp, through a variety of media, the depth of man's feelings and the scope of his achievements; and through them acquires a better understanding of himself and others.

The objectives of the library media center are:

- To support curriculum programs on all school levels by providing a variety of book and non-book materials for the needs of pupils.
- To assist with programs for the development of competency in reading, listening, and viewing skills in the content areas.
- To impact a genuine and lasting love of reading and appreciation of fine literature.
- To develop an understanding and aesthetic appreciation of visual and aural art forms.
- To encourage listening, viewing, and reading as aids toward the achievement of the basic developmental tasks of youth.
- To develop an understanding of, and respect for, different ethnic groups and their contributions to the world.
- To promote an understanding and appreciation of American ideals and institutions as well as a responsibility for supporting them.
- To reenforce, enrich, and extend classroom learnings through planned library experiences.
- To develop a continuity of instruction in the skillful use of school library media resources.
- To be a participating agent in curriculum development, schoolwide projects, and experiments, and school related community programs.
- To provide the incentive for lifelong productive and satisfying use of libraries, museums, and other multimedia information centers.

The school library media provides for a planned and sequential program of reading, listening, viewing and guidance throughout the grades. From these experiences, pupils understand that books, recordings, and films:

- Bring relaxation and enjoyment.
- Provide emotional, spiritual, and aesthetic experiences.
- Stir the creative imagination.
- Stimulate interest in new fields and expand existing ones.
- Supplement knowledge obtained from other sources in the content areas.

- Lead to an understanding of one's self and others and an insight into varied human and social relationships.
- Develop an appreciation and respect for the cultures of other lands.
- Communicate understanding and appreciation of a democratic society and build faith in its values.
- Bring the past to life and lead to an understanding and tolerance of past events.
- Satisfy curiosity about and awaken interest in nature and environment.
- Enrich the intellect and emotions by building a body of "remembered" literature through the years.
- Develop lasting taste through experience with the best of each literary genre, and discrimination in selecting books, films, and recordings.
- Discover the diversity of viewpoints and reactions to the human condition.
- Develop critical thinking and sound judgment through the opportunity to select and interpret from a variety of opposing viewpoints on a subject.
- Supplement and enrich the curriculum areas by using well-presented and authoritative informational materials.

In planning the guidance activities grade by grade, the librarian considers several factors: age and maturity of pupils, their reading competence, the teachers' judgment, the children's interests, personal and curricular. Each pupil is given informal individual guidance in the selection of needed or requested materials. The librarian is flexible at all times, ready to modify the program according to the needs, interests, and capabilities of the individual. (New York Board of Education, 1975, pp. 1-8)

Similar to the many examples listed previously are aims of media programs provided by Brewer and Willis (1970), Gillespie (1973), Keene (1976), Lowrie (1970), Peterson (1979), Pollette (1973), Rossoff (1971), Sullivan (1968), and Trinkner (1962). Like the others,

they consistently focus on meeting the curricular and personal needs of students, and the provision of a proper environment.

The Aims of IMC Programs and Conditions of the Self-Concept

A review of the previous section on aims and objectives of IMCs will point out the desire of IMC programs to provide a climate conducive to the promotion of the self-concept, as outlined in the section on factors relating to self-concept. This section will provide examples of the IMC focus on success, independence, feeling valued, warmth, positive atmosphere, feeling accepted, fostering cooperation, trust, freedom, feeling challenged, and having a variety of resources.

The area relating to the experience of success in IMCs is described by the following: Freedman (1976), Media Programs: District and School (1975), New York Board of Education (1975), Peterson (1979), Rossoff (1971), Trinkner (1962), Ward (1973), and Wood (1976), Standards for School Media Programs (1969).

The area relating to independence, self-directed learning and inquiry in IMCs is described by the following: Media Programs: District and School (1975), Gillespie (1973), Lowrie (1970), Matthews (1976), New York Board of Education (1975), Peterson (1979), Rossoff (1971), Trinkner (1962), Ward (1973), Wood (1976), Standards for Instructional Media Programs, 1977-82.

The area relating to the feeling of value and respect on the part of the child is described by the following: Fischer (1974), Freedman (1976), Gillespie and Spirt (1973), Lowrie (1970), Media

Programs: District and School (1975), New York Board of Education (1975), Peterson (1979), Trinkner (1962), Standards for School Media Programs, 1977-82, Davies (1974), Wood (1976).

The provision of warmth as provided by a warm atmosphere is described by the following: Davies (1974), Fischer (1974), Matthews (1976), New York Board of Education (1975), Peterson (1979), Rossoff (1971), Standards for Instructional Media Programs, 1977-82, Trinkner (1962).

The area relating to a child's feeling of acceptance and trust is described by Davies (1974), Gillespie (1973), and Peterson (1979).

The area of cooperation in school media programs normally related to resource sharing between libraries or cooperation between teachers and librarians. Two examples of aims of the IMC in fostering a spirit of cooperation among students were located in Peterson (1979) and Trinkner (1962).

The area relating to the establishment of trust in the child was located in Davies (1974) and Peterson (1979).

The area relating to the encouragement of freedom for the child is included in aims described by Davies (1974), Matthews (1976), New York Board of Education (1975), Standards for Instructional Media Programs, 1977-82, and Trinkner (1962).

The area relating to the provision of challenges provided by a variety of resources was described by the following: Davies (1974), Matthews (1976), Media Programs; District and School (1975), New York Board of Education (1975), Rossoff (1971), Standards for Instructional

Media Programs, 1977-82, Trinkner (1962), Ward (1973), and Wood (1976).

This summary shows that according to the aims of IMC programs, the IMC purports to promote a positive self-concept in children.

There is some evidence to show that educators believe that the IMC program can promote positive self-concepts. Two examples will be given. Diehl (1978) secured an Elementary and Secondary Education (ESEA) IV C grant to develop an elementary school IMC designed in part to produce a significant increase in self-concept among fourth grade students. Higbie (1978) secured an ESEA (Elementary and Secondary Education) IV C grant to enhance the self-concept of elementary students through media production.

While no research substantiating the IMCs' ability to promote the self-concept of children was located, the review of the literature clearly indicates the intent of IMC programs to promote positive self-concepts in children.

The review of the literature clearly indicates a need for research in the area of the IMC's role in promoting the self-concept. The need for self-concept research, in general, is summarized by Shavelson, Hubner, and Stanton (1976). Self-concept, they say, "whether used as an outcome itself or as a moderator variable that helps explain achievement outcomes, is a critical variable in education and in educational evaluation and research" (p. 408). Shavelson et al. provide further evidence of studies of self-concept in saying, "The importance of the construct and the paucity of studies that

examine self-concept interpretations of their measurements make construct validation research vitally needed" (p. 410).

CHAPTER THREE

METHODOLOGY

The purpose of the study was to determine whether elementary school instructional media center (IMC) programs with full-time professional and support staff, as well as a wide variety of printed and audiovisual materials, had conditions which promoted the development or enhancement of positive self-concepts in elementary school children. To examine the question of the promotion of positive self-concepts, three case studies were conducted in a rural, an urban, and a suburban elementary school IMC.

Varied methods of data collection including survey, observation, diary, and interview were utilized in the case studies described above. This chapter explains the rationale for the research design and discusses the environment of each case study. The chapter considers: a) research design and methods; b) design of instruments; c) data collection; d) data analyses; and e) data reporting.

Research Design and Methods

Research Design

The research design consisted of the use of observation, interviews, and a diary of IMC activities at each school. Following a

pilot study, three case studies in a rural, an urban, and a suburban setting were conducted. The utilization of each research method will be briefly described in the paragraphs which follow.

Direct observation was the major method of data collection employed. It was used to obtain data on IMC activities focusing on specific IMC areas, such as reference area, card catalog area. The observation process included recording student behaviors and the physical setting of the IMC.

The second method employed was that of interviews of students and media specialists. Student interviews were utilized to verify observations and obtain insights on student perspectives of the use of the IMC and factors which contributed to those perspectives. Interviews with the media specialist in each school were conducted to provide a perspective of the media specialists' philosophical orientation, her attitude toward student utilization of the IMC, and to verify observations.

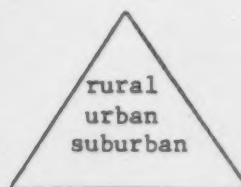
The third method employed was data gathering through the use of a diary of all activities taking place in the IMC in any one time period. The diary was used to expand results of the direct observation by providing insights into the whole IMC experience, rather than its parts.

These methods -- observation, interviews, and diary -- constituted the research design in each case study. The research design is summarized in Figure 1.

FIGURE 1
Research Design

1.

Observation



Interview

Diary

2. Method - Observation

Case

Student
enrollment

Grades served

Rural	Urban	Suburban
401	500	530
1-5	K-5	K-6

3. Method - Interviews

Grade 3

Grade 4

Grade 5

Grade 6

Total

Rural	Urban	Suburban
3	3	3
3	3	3
3	3	3
-	-	3
9	9	12

Media

Media

Media

Specialist:1 Specialist:1 Specialist:1

4. Method - Diary

Diary

Rural	Urban	Suburban
Yes	Yes	Yes

Research Methods Utilized During Each Case Study

A descriptive observation was one method selected for this study. An observation form was designed which employed a checklist noting, first, the presence of an activity, and second, a tabulation of the number of occurrences of the predetermined activities or categories. The observation form was developed to record the presence of activities which had been defined as indicators of positive self-concept conditions in the area of cooperation, independence, and success. Another part of the observation was a written description of the IMC setting, including types of furnishings, displays, materials, and arrangements of furnishings, displays and materials. Descriptions were written in detail at each school. The physical descriptions focused primarily on the following conditions: positive atmosphere, being challenged, and feeling valued.

The second method of data collection consisted of interviews. Three students from each grade, beginning at the third grade, as well as the media specialist in each school, were interviewed by the investigator to obtain individual, personal responses to indepth questions. The student interviews focused on questions relating to conditions which might promote positive self-concepts such as what the students normally did in the IMC, how often they utilized the IMC, how free they were to use the IMC, and how successful and independent they felt in that utilization. Sample interview questions included: "How do you feel about coming to the IMC?"; "How often do you usually come to the IMC?"; "What do you usually do when you come?"; "Can

you find what you're looking for in the IMC by yourself?"; "How do you feel when you're able to find just what you need by yourself?"; "How do you feel when you're not able to find what you need by yourself?"; "Do you ever help other people in the IMC?"; "What do you like best of all about the IMC?"

The media specialist in each school was also interviewed to get some background of the history of the school's IMC, the media specialist's training, attitude and philosophy toward student utilization of the IMC, as well as the perceived role of the principal and teacher in IMC development. The interview was also used to gain insights about the media specialists' feelings concerning the IMC's role in promoting and enhancing the development of a positive self-concept in elementary level children.

Sample questions asked of the media specialists included:

"How vital do you feel the IMC program is to the school's instructional program?"; "Why do you think so?"; "What do you feel are the most valuable contributions this IMC offers to students?"; "What do you try to help students achieve by the time they complete 5th (or 6th) grade, in skills, in attitudes, in IMC usage?"; "What opportunities do students have to use the IMC independently?"; "Describe what you would see as the ideal IMC program at this school."

The third method of data collection employed during each case study was the maintenance of a diary of activities taking place in the IMC. The diary was employed to record interaction between persons using the IMC, especially between the media specialist and

students, the aide and students, and student interaction amongst themselves. It was also used to provide a perspective of the entire IMC program at a given time, as opposed to the segmented, and very specific, area observation noted in the main observation method. The diary was kept daily in each school studied by the investigator at all times the IMC was open, except at those times when student interviews were conducted.

The design, methods, materials and instruments were all based upon normal elementary school activities in IMC settings. Thus, this descriptive level research was conducted in its natural setting.

Intervention by the observers was kept to a minimum. The media specialist in each school was encouraged to ignore the presence of the observers, and to literally pretend that observers were not there. In general, students also ignored the presence of observers, although as students began to accept observers' presence as natural, a few occasionally asked for assistance or asked what observers were doing. Students at the urban and suburban schools were more accustomed to visitors of all types and appeared to accept observers' presence as natural. Students at the rural school were more apt to focus attention on the visitors, and sometimes look to see whether they were being watched or not.

Instrumentation Design

Preliminary Development

Before any instruments were developed, the investigator

conducted a search of the literature to identify conditions of positive self-concept common to the theoretical and practical basis of numerous studies in the area of self-concept. The review of the literature, which appears in Chapter Two, was used as a basis for determining conditions of observable self-concept which could be used in the study, and which were repeatedly found in the literature examined. The conditions were: fostering cooperation, independence, success, positive atmosphere, being challenged, and feeling valued/accepted.

After preliminary conditions of the positive self-concept were agreed upon, I (the investigator) drew upon past experience as an elementary school media specialist, educational background which included a bachelor's degree in elementary education, master's and specialist degrees in librarianship, and work as a state level consultant in the area of instructional media. At the state level, I was involved in observations and evaluations of numerous elementary school IMC programs. Based upon my professional background and training therefore, I developed a preliminary observation sheet of activities and physical settings which could be observed and recorded as indicators of the presence of the chosen conditions of self-concept. I also developed a preliminary survey instrument, and interview questions for the students and media specialists.

The survey, interview, and observation instruments and activities chosen as indicators of self-concept conditions to be studied were submitted to a panel of experts for agreement and elaboration.

The panel of experts consisted of five individuals (Appendix A).

All resided outside the state of Wisconsin where the study was conducted. The panel was represented as follows:

- 2 experienced building level elementary school media specialists

- 1 district level media director with building level experience

- 1 state department of education instructional media consultant

- 1 associate professor in librarianship with a specialization in children's and young adult services in the public schools

The responses of the panel of experts, which were in general agreement, were used to cull activities or questions, and add others.

To summarize, observation techniques and all instruments were originally generated by the investigator. They were refined initially based upon input from the study's panel of experts. This provided the first validity check.

Steps involved in refining and validating the instruments as well as a description of how the instruments were used is described in the paragraphs which follow.

Survey instrument - The survey instrument was used to find out information about potential sites for visitation and to select sites. In addition to its original development by the investigator, and refinement by the study's panel of experts, the survey instrument was also field tested using five practicing media specialists in the state who would not be receiving the survey. Finally, the survey

instrument format was refined through input from the Department of Public Instruction's forms management section.

Observation Categories

After initial development by the investigator and input from the panel of experts, the observation instrument was further refined in interaction with the case study observers both before and after the pilot. Observation categories were used to record presence and number of occurrences of activities determined to be indicators of the conditions of self-concept being sought, to record the IMC area being examined, and the grade range of the students observed. Observations were recorded in five-minute segments, while the observer was as unobtrusive as possible, appearing to be examining books or other IMC materials and the like. Unobtrusive observations were more difficult on the day when two observers observed together, particularly when occurrences often occurred quickly, requiring direct concentration on the area observed.

Responses were categorized into major headings of fostering cooperation and independence, with division by "together" and "alone," and activities such as reading, studying, browsing, checking out books, and selecting materials. Other major categories included required and/or voluntary cooperation involving more than one student, required or voluntary independence, and success. Examples of activities in these categories included playing games, doing media skills activities alone, utilization of sequential location skills in

acquiring material.

Interview questions - After initial development by the investigator, and input from the panel of experts, the interview questions were further refined. The student interview was refined after a try-out on a volunteer sixth grade neighbor of the investigator. Both the student and media specialist interviews were further refined after the pilot was conducted.

In addition to refining instruments, the panel of experts provided feedback on a sheet of IMC indicators of conditions to be examined (Appendix B).

Data Collection

Field Procedures

Field procedures included the following areas: a) pilot study; b) activities prior to the study; and c) activities during the study. All of the field procedures employed will be explained in this section.

Selection of Schools for Study

A survey was distributed to thirty media specialists in central and southern Wisconsin elementary schools as a basis for the selection of the schools which would participate in the study. The survey sought background information about the school and the media specialist, quantitative information about the IMC collection,

program, and facilities, and information about the types of activities taking place in the IMC, and support staff (student and adult volunteer assistance) utilized (Appendix C). Selection of the thirty schools receiving the survey was based on a Department of Public Instruction survey of the status of building level media programs in Wisconsin, conducted in 1978. From a list of elementary schools indicating full-time media specialists, sites were chosen in the central and southern part of Wisconsin to receive the survey instrument. The investigator verified by telephone beforehand which schools had maintained full-time media specialists. No more than two schools from any one district were surveyed, since only three schools were needed for the study and since, except for the pilot, only one urban, one rural, and one suburban school would be studied.

After sending letters to district administrators (Appendix D) seeking permission, and receiving permission from districts in December, 1980, to distribute the survey, the surveys were distributed in January, 1981, to the media specialists in the thirty schools (Appendix E).

Before reviewing individual returns, the investigator independently developed a system assigning points to survey information for the purpose of objectively evaluating the surveys and choosing schools (Appendix F). Schools were then evaluated and later divided by type, i.e., urban, rural, and suburban and arranged within type by the score assigned.

All schools selected for study received scores at or near the

top. Other factors considered in selecting the schools included basic similarities in terms of size of student enrollment, similar quantity and type of material in the collection, and proximity to the researchers' home base.

Pilot Study

The pilot study was conducted at a K-6 elementary school located in a rural community near the capitol of Wisconsin with a population of approximately 2,000. The school population of 529 students was similar to that of the schools in the case study. In addition, other criteria used in selecting the actual case study sites were utilized in the selection of the pilot such as number of and variety of materials, similar size of facility, at least three years as media specialist in the school, and having the same building principal for at least three years.

The observation techniques, and interview questions were all tested in the pilot. The actual observation period was two days, with the second observer being present for one half day.

From this pilot experience, the observation activities were expanded and redefined, and the observation method refined to include the use of a diary. All materials and instruments were pilot tested and reworked and the observation categories of activities were refined and enlarged in preparation for the actual study. For example, the observation instrument employed for the pilot study was one page. Based upon the pilot, the investigator and the observers

expanded the observation instrument to two pages by generating more activity categories to be observed. The categories of activities observed were also defined more tightly to insure that activities were mutually exclusive (Appendices G and H).

Activities Prior to Study

After the evaluation of thirty surveys submitted to the investigator by the selected elementary school media specialist, three sites were selected, a rural, an urban, and a suburban. Permission was received from the superintendent or his designee to invite the schools to participate. After affirmative responses were received from building level principals, the media specialist in each school was contacted by telephone. In all cases (superintendent, principals, media specialists), persons were told that the purpose of the study was to highlight contributions of the IMC program to the elementary school program. They were given other basic information concerning the number of visitors, the requirements of the school such as interviews with students and the media specialist, and were asked for a recommendation of a week for the study.

At no time prior to or during the study were the principal and media specialist told that the specific focus was on observing conditions of the positive self-concept. This was done to help insure that behaviors observed were not biased by a knowledge of the study's specific intent.

Written letters of confirmation were sent to the principal and

the media specialists at invited schools (Appendix I).

At a prearranged time, the researcher and the fulltime observer visited each school prior to the study to meet with the media specialist and provide information on what to expect during the week of the study, to discuss procedures such as selection of students to be interviewed, such as how to introduce the study to the staff and students of the school, and to determine the location of various areas of the IMC to be utilized in the observation. While all three principals were invited to this meeting, none chose to or were able to attend. A schedule of activities or classes scheduled during the week of the study, diagram of the IMC (where available), and hours of school and IMC operation were provided by each media specialist to the investigator and observers. Arrangements were made for all details, including the location of the interviews, and other questions were answered.

Each school was asked to indicate that there would be visitors in the IMC all week learning what kinds of things students did in the IMC. Principals were especially asked to be certain teachers knew the observers wanted to see what a typical week in the school's IMC was like, so that teachers would not restrict student utilization in any way. The media specialist was told that the observers wanted to see the IMC operation and program as it really was for a typical week, and to ignore the presence of the observers.

The students to be interviewed were selected by the media specialists and teaching staff. Parent permission letters were

utilized in the urban and suburban schools (Appendix J). Students returned letters or had their parents call the school. In no instance was permission not granted.

The training of the two observers was assumed by the investigator in a collaborative effort resulting from the observers' participation in the pilot study, review of study information including the dissertation proposal, and a review of the literature. Activities within categories were exclusively defined, and the activities list was expanded. The observers, one male and one female, were in the same general age range (early to mid-forties), had advanced degrees (master's in one case and master's and specialist in the other) in the field of librarianship, and had experience as teachers and media specialists. Together, the investigator and the two observers thoroughly discussed the study, the background to the study, observation techniques, observation activities, procedures for recording, and overall conduct of the study.

After sites were selected for the study, and the observation instrument was refined, the investigator collaborated with a member of the media consultant staff of the Michigan Department of Education. Together, based on their experiences in the field, the frequency of expected occurrences of activities to be studied was estimated.

Activities During the Study

The investigator and the observer arrived at least fifteen minutes before students entered the building each morning. The

second observer arrived at a similar time on the second day of the study. The investigator and the observer positioned themselves so that activities at the check-out desk could be observed first, assuming that many students would be returning and/or checking out materials. Use of the observation instrument began as soon as student activity was observed, or as soon as the observer could determine that initial activities were deliberate and not just a few seconds in passing. The investigator began the diary as soon as the first student entered the IMC.

Throughout the day, the observer observed various parts of the IMC for individual five-minute intervals. Some attempt was made to assure observations of all or as many IMC areas as there had been activity during the day. An observation did not begin in an area until some student activity was noted there. Observers and the investigator remained each day until the school day ended and no students were using the IMC. The second observer always came on the second day (Tuesday).

Observations were recorded primarily using a back-to-back observation sheet on a full-time basis by the same observer in each school. The second observer, utilized on the second day of each five days visited in each school, assured the reliability of the instrument.

Student interview questions were asked of three students from each grade beginning at the third-grade level. The third grade was selected as an appropriate grade because students would generally

have used the IMC for a period of time, would have received instruction from the same media specialist over time, and would be generally able to express themselves verbally more completely than K-2 students. The investigator was not involved in the selection of students to be interviewed. The media specialist was asked to see that students were selected who:

- 1) would be willing to talk to the interviewer and could express themselves;
- 2) would include both boys and girls;
- 3) would represent different classes in the grade level;
- 4) included students at all normal ranges of the IQ level; and
- 5) where appropriate, represented various ethnic/minority groups found in the school.

Students were interviewed by the researcher at the student's and teacher's convenience throughout the week. Interviews lasted approximately 20 minutes each.

Interview questions focused on student descriptions of how they used the IMC, and how they felt about the overall IMC program (Appendix K).

Media specialist interview questions were asked of each media specialist at the end of the fourth day (Thursday) of the study (Appendix L). These focused on the media specialists' educational background and professional experiences, philosophy toward library services and elementary-age student capabilities and preferences in this area, and attitudes toward what students would achieve in terms

of skills, attitudes, and library usage by the time they leave the school. A major part of the questions focused on gaining a personal perspective of attitudes toward the conditions being examined as promoters of positive self-concept in children. Interviews lasted approximately two hours.

Information sought included number of years the IMC had existed in the school with full-time professional and support staff; opinions on the attitude of parents, teachers, and the principal toward the program and their role in promoting it; libraries outside the school utilized by students; perceptions of ability of students at various grade levels to independently locate materials; evidence in manner in which the media specialist's IMC philosophy was promoted in the actual IMC program.

Student and media specialist interviews were all recorded using a tape recorder.

On Friday at the end of the school day, the investigator and the full-time observer always met with the media specialist and the principal (in all but one case) to share information on what had been observed. The observation instrument was shared, as well as interview questions of students and media specialists and general responses of students.

After each school day ended (or when there was no activity in the IMC), the observer organized the observation sheets. Audiotapes used were labeled. The investigator and the observer again discussed the observation techniques and reviewed all activity category

definitions.

The investigator kept a written diary of all IMC activities by choosing a vantage point where all activities could be observed, or by walking around the IMC every few minutes. Interactions between the individual student and the media specialist, between the individual student and the aide, and between the students among themselves were particularly noted. Any formal interactions between the media specialist and a class or a group of students, such as training in the area of media skills, or storytelling were also noted in the diary.

Study Participants

The study participants for this study included the investigator, the observers, the media specialist, the media aide, volunteers (whether adult or students), students involved, and teachers utilizing the IMC. The observers were included as part of the population because the information derived from observation obtained through their eyes. Observers were a female and a male, with the male being the part-time observer. Steps taken to reduce observation variations included using observers of similar age, background experience, and disposition. In addition, training for the study was conducted for both observers at the same time, and explanations of each activity and the activity's definition were mutually agreed upon prior to the study.

Media specialists in the study were all women. Each media specialist had certification as a K-12 school librarian, and either possessed certification as an audiovisual coordinator or had earned enough credits to receive the certification if she applied. Two of the media specialists held master's degrees in the instructional media field, with one of these media specialists also holding a master's degree in curriculum and instruction. The third media specialist, while not possessing a master's degree, had completed approximately thirty credits at the graduate level in librarianship. Each media specialist had some teaching background, and had been a full-time media specialist in the building in which the study took place for at least three years. The principal in each school studied had served in that capacity for at least three years. Student enrollments in each school ranged between 400-550. Each school IMC employed the equivalent of one full-time aide. The IMC collection in each school contained at least 12,000 books and included audiovisual materials and magazines which were accessible to students. Each IMC was open concept, i.e., few walls and open access to students throughout the school day. The media specialists all estimated that between 76-100 percent of the students used the IMC each week. Each media specialist employed flexible and open scheduling as well as some scheduled classes each week. All media specialists were highly regarded by their school principals as well-liked, well-organized, invaluable to the school educational program, and outstanding media specialists.

The first case study was conducted in a small, rural town

located between Madison and Milwaukee, population 14,758. All users of the IMC, i.e., the entire student body of 401, participated in the study except for preschool students. While the school itself served only grades 1-5, kindergarten students visited the IMC while the study was being conducted so they were included, as well. The students at the school ranged in age from 5-12. Classes were heterogeneously grouped.

The second case study was conducted in a small suburban community near Madison, population 11,500. All users of the IMC, i.e., the entire student body of 530, participated in the study. The school served K-6. This was the only school studied with sixth-grade students. Students ranged in age from 5-13. Classes were heterogeneously grouped.

The third case study was conducted in a Wisconsin urban city with a population of 175,000. All users of the IMC, i.e., the entire student body of 500, participated in the study. The school served K-5. Students ranged in age from 5-12. Unlike the other schools visited, this school had an ethnic minority population of 9.5 percent of which Black students comprised 7 percent of the school enrollment. In addition, redistricting and school closing made this school unique in that at least one-third of the students in the school had been transferred from another city school at the beginning of the school year approximately seven and one-half months before the study.

In all field settings, the students were cooperative, open,

and not too affected by the presence of observers. The only possible exception occurred in the rural school, where visitations from persons not employed at the school are more limited than in other schools studied. In the rural school, students on occasion were noticeably watching the observers and were distracted from normal IMC activities. This was particularly true on the day that two observers were involved in the study.

Interviews with the students and media specialists were taped. Students were given the opportunity to hear their voices after the interview, and all but a few were eager to do so.

Terminology

In the field of instructional media, terminology varies depending upon the geographical area in which the school is located, ease with which students and teachers accept the terminology, and with the philosophy of the school principal and media specialist. While this study uses the terms IMC (instructional media center) and media specialist, the terms library and librarian were also terms used in areas studied. The researcher ascertained the terminology most commonly used in the school, particularly that used by the students, and employed that terminology in actual interviews and discussions.

Data Analyses

The manner in which the research data were analyzed will be reported in this section. The emphasis in this section will be on

the observation, interview, and diary analyses.

Observational Model

Because two observers were utilized to insure instrument validity and interobserver reliability, it was necessary to determine the degree of reliability between observers. A grid was developed for each school visited, and observation sheets prepared independently by the observers were examined. Each activity was assigned a number, e.g., "going to the IMC together" received a number 1, "using the card catalog together" received a number 2. There were 39 activities altogether, with the grid created with 40 points to allow for non-agreement between observers. The grid points were then plotted. These plots provided a visual picture of reliability. A simple count of agreement and nonagreement was tabulated to gain a rough percentage of agreement. Next, the Kappa formula was employed to account for chance agreement. A coefficient of interjudge agreement was then determined for each school on the day in which two observers were used.

The observation sheets for the main observer were used to prepare the data for computer analyses. The computer analysis package used was Statistical Package of the Social Sciences (SPSS). Statistical Package of the Social Sciences, originally developed at Stanford University in the mid-1960s, makes a wide variety of data management facilities and statistical procedures possible in a simplified process of data analysis. It is widely used throughout the nation in data analyses.

Using SPSS, a computer file was created of a total of 592 observations for all three schools. For each five-minute sheet, the file noted the school, day, area observed, observation sequence, activities observed, and number of occurrences in the five-minute observation period.

Prior to the on-site study of the IMCs, the investigator, in collaboration with another instructional media consultant in the Michigan Department of Education, listed each activity found on the observation model. Each activity was listed under one of the three designations of expected occurrence, based on professional knowledge, experience and previous work-related observations of IMCs meeting the general criteria of those being studied. The designations were: often, sometimes, and occasionally. Once the data were collected, these expectations were compared to the actual frequencies recorded for each of the activities.

After the file was created and saved, observations were provided by the computer using the Statistical Package for the Social Sciences (SPSS), according to the frequency of a recording of "presence" for each of the 39 activities. The information provided included the school(s) in which the activity occurred, the day(s) on which the activity occurred, the time segment(s) in which the activity was recorded, the grade level(s) engaged in the activity, the area(s) in which the activity took place, and the number of occurrences recorded in each five-minute segment for the activity.

Using the raw data generated, activities in which at least 20

observation sheets recorded the presence of the activities were examined using a two-way analysis of variance. Relationships between each of the activities selected for further study and school day between each activity and level (primary, intermediate, and primary/intermediate) in correlation with urban, rural, or suburban school settings were examined. For those relationships in which statistical significance was found, Scheffés were also performed.

Observation of Physical Description

The description of the physical setting of each IMC was analyzed according to predetermined criteria (Appendix B) focusing on the conditions of positive atmosphere, being challenged, and feeling valued. For example, accessibility of equipment, and audio/visual materials for use by students was noted; displays of student work were viewed; the presence of games which might be challenging or thoughtprovoking was noted.

The physical characteristics which were noted in each school were analyzed according to the criteria established and reported.

Interviews

Interviews were conducted with three students from each grade level beginning at the third grade and with each media specialist. All interviews were audiotaped on cassettes.

For student interviews, a form was developed to record responses to the interview questions based on the audiotapes. Then, individual responses were categorized according to school, grade,

and sex on a large chart. Responses to each of the questions were categorized according to total agreement of respondents to a question, agreement in most instances, and areas of disagreement. Responses were presented utilizing charts and narrative format. Frequencies of responses have been noted where appropriate.

Media specialists' interviews were transcribed in their entirety from the audiocassette tapes. Responses to each question were categorized according to similarities, differences, detail, and according to self-concept conditions being studied. A narrative account of interview responses was rendered. Details of responses and areas of diversity were descriptively reported.

Diary

To analyze diary contents, each diary was read several times. Contents were noted whenever they showed examples of the conditions of self-concept being studied. Each school's diary was examined, as well, in terms of unique features of the IMC and areas of commonality, as well as areas of diversity.

Overall Analysis

Based on separate analysis of the observation model, physical description of each IMC, interviews and diary evaluation, informal comparisons of these data were developed by the investigator. Areas of common agreement were noted, as well as areas of disagreement. These comparisons allowed the investigator to create as full, and as accurate, a description as possible of the three case studies and the data collected.

CHAPTER 4

RESULTS AND DISCUSSION

The study focused on a rural, an urban, and a suburban elementary school instructional media center (IMC) program having full-time professional and support staff, a wide variety of print and audio-visual materials, as well as a program of activities and services. The purpose was to determine whether the IMC had conditions which could be expected to promote the development or enhancement of positive self-concepts in elementary age children. The conditions included in the study were cooperation, independence, success, challenge, feeling of value/acceptance, positive atmosphere.

The results presented in this chapter have been reported by the method of data collection: observation, interview, and diary. Within each method used, data results are summarized.

In most instances, the research method was used to obtain data about all of the conditions being studied. Table 1 illustrates the conditions described within each method utilized.

Prior to the report of data, general data pertaining to each of the field settings are descriptively rendered.

This chapter, then, includes the following: (a) observation

TABLE 1
Conditions Studied According to Method Utilized

Method	Condition					
	Cooperation	Independence	Success	Challenge	Value	Positive Atmosphere
Observations:						
Physical setting				X	X	X
Model	X	X	X			
Interviews	X	X	X	X	X	X
Diary	X	X	X	X	X	X

data, including a description of the field setting, and results of the observations; (b) interview data, including students and media specialists; and (c) diary information which highlights similarities, unique characteristics and overall IMC operations.

Observation Data

Field Settings

The field settings of the IMCs studied will be described not only to provide general information about the setting, but also as indicators of the presence of some conditions being studied. The conditions in which the physical setting was important were positive atmosphere, feeling of value/acceptance, and challenge.

All of the IMCs studied were modifications of the open concept, i.e., two walls rather than four. Each could be described as being located at or near the center of the school building. While each IMC cited has been illustrated in Appendices O, P, Q, a narrative description which focuses on indicators of conditions being studied will be given for each field setting.

The indicators of positive atmosphere agreed upon before the study began were: materials/displays which focus on senses; accessible print and audiovisual materials; accessible equipment; decorations which were inviting and encouraged students; accessibility for primary age children.

Rural school.

In terms of the first indicator of positive atmosphere, materials/displays which focus on senses, the IMC located in the rural community possessed many such indicators which focused on touch, sight and hearing. These included a wasp nest; kangaroo skin; deer skin; hand puppets; rock collection; frog collection; many stuffed animals, including a six-foot long walrus; hinge man made of hinges. Students were aware that manipulating the many objects was permissible, for they were observed casually using all of these during the week of the study. In addition to those named previously, sight was also stimulated by beautifully laminated pictures strategically placed throughout the IMC at appropriate subject areas; a mirror; ceiling mobiles; attractive books open atop shelves; posters, stuffed animals and other pictures of popular childhood characters including Snoopy, the Cat in

the Hat, Curious George, the Muppets, Charlotte of Charlotte's Web, Beetle Bailey; a 4¹/₂-foot tree minus leaves and roots, which was held up with a Christmas tree stand and which featured different attachments, depending on the nearest holiday. At the time of the study, green shamrocks were attached which children looked at and touched. Large bright signs which gave Dewey decimal numbers and other directions were also located throughout the IMC. A seashell collection provided an example of a sense of hearing.

Additional physical aspects of the IMC will be discussed in relation to other parts of the study as the chapter continues. While any one area could be focused on for appeal to the senses, the card catalog provided a worthwhile example. The three-foot tall card catalog area was provided with a small carpeted benchtype seat in front. On top of the two card catalog furniture areas were: a box of small books (4" x 6"); a small plant with a colorful paper umbrella; a frog bank; a can holding pencils decorated to look like a dog's head with floppy ears; a stuffed lizard; a sign on how to use the card catalog; and a small skin labeled "deerskin."

In terms of the location, and accessibility of equipment and materials, all books and audiovisual materials were located on open shelves throughout the IMC. Books which were especially appropriate for primary grade students were found on shelves with heights which were appropriate. There was, therefore, ease of access to materials. Equipment was located at study carrels so that students could use print or audiovisual materials there. Equipment at carrels included

two sound filmstrip projectors with headsets; a silent filmstrip projector and cassette tape recorder with headsets; a record player with headphones; and a filmloop projector. Boxes of filmstrips and filmloops were located at or near the carrel containing equipment for that materials' use.

Decoration of the IMC which would invite/encourage student use was another indicator of a positive atmosphere. All the features mentioned previously contributed to the IMC's decoration. In addition, green plants were located throughout the IMC, some hanging plants, a few tall freestanding plants, including a three-foot tall banana tree. Tables and chairs were of two sizes which were appropriate for younger and older students. Rocking chairs and whistle seats were also provided. The entire IMC area was carpeted. While no bulletin board area existed, student work was featured in a display of custom-made picture books by students in grades 3, 4, and 5. These were found on a rectangular table in the easy section. Other student work included bookmarks which were available at the circulation desk. Paintings of one of the school's teachers were also displayed in the IMC.

The IMC atmosphere would be incomplete without mention of the interest tables. These included a temporary doll display contributed by first and second grade students, including some antique dolls; shell collection; rock collection; matchbook collection; table featuring books appropriate for the month; Australia display featuring a stuffed Koala bear, Australian stamps, kangaroo skin, and books about Australia; large wasp nest; puzzles; photo album of students in the school

(annual class pictures); Wisconsin table featuring pamphlets, maps, and books.

The physical setting was used to provide an indicator of the condition, feeling of value/acceptance. Student-made picture books have been discussed. Each book contained a check-out card. Those students wishing to do so could contribute the book to the IMC permanently. Younger students were encouraged to bring their dolls and their teddy bears for display. A large frog collection also featured contributions of students. The frog was especially important to the rural school, for it represented the school mascot and also the school's silent reading program, called RIBET.

The physical setting provided some indication of whether a variety of materials in varied formats, interests, and levels of difficulty could be found as an indicator of the condition, challenge. Materials ranged from picture books appropriate for preschoolers to books appropriate for junior high school students. Reference materials included some which could be found in senior high schools, such as almanacs and encyclopedias. Materials were available in print and audiovisual formats and included newspapers and magazines. Games were located in a drawer of the IMC. One challenging game found at the circulation desk was called Genius.

To summarize the findings of the rural school's physical setting, examples were found in all categories which were indicators of positive atmosphere, feeling of value/acceptance, challenge.

Urban school.

Of the school IMCs visited, the urban school was the most elaborate. The physical setting gave the investigator the impression of another world - fantasy, yet real. This was the only IMC in which an annual theme was used. The theme of the year centered around rainbows, along with a large wooden sign extended from the ceiling entitled "We're Celebrating Childhood: Love Spoken Here."

The first indicator of positive atmosphere will focus on materials/displays which focus on the senses. The IMC was abundant with materials focusing on sight and touch including many stuffed animals which included a lifesize freestanding sheep; three-foot tall Johnny Appleseed; three-foot tall styrofoam dinosaur; lifesize Maypole with streamers to perform the May dance; attractive books atop shelves.

Interest areas at the urban school were abundant and numbered approximately twenty. They were located all over the IMC in areas including all tables and card catalog. Each in its own way offered stimulation for the senses. A few will be provided as examples. At the reading table interest area, there was a beautiful hand sewn stuffed white bird which illustrated Tico's Wings, a children's book. Among books on the table was a handmade book belonging to the media specialist. It featured a story called Sew What that included illustrations of cloth and special sewing designs. The bird and the book were creations of the adult daughter of the media specialist. The examples of these interest areas focused on sight and touch. Other interest areas included fir branches, sewing fabrics, deer horns.

The sense of hearing might be stimulated by the seashells on display or the chimes in the shapes of apples.

The senses of taste and smell were emphasized here more frequently than at the other schools visited. At least monthly, edible treats were provided to the students. During the study, apple slices and maple-flavored cookies were served to highlight Arbor week.

A second indicator of a positive atmosphere was accessibility of materials and equipment. Nearly all books were located on open shelves. Restricted shelving was utilized for a few of the popular titles which were considered controversial. Audiovisual materials were largely accessible to students in the IMC area. The exception was that any audiovisual materials which teachers desired for classroom instruction only were kept in the workroom area. Students, however, could have access to them. Shelving heights were appropriate for accessibility.

Equipment was located at electrically-wired carrels and at specially arranged equipment areas. Equipment included filmloop projectors, record players, sound filmstrip projectors, silent individual filmstrip previewers. Materials utilizing the equipment could be found nearby.

A third indicator of positive atmosphere examined was the IMC decor. Thanks to the rainbow theme, colors of the rainbow were found throughout the IMC, especially hanging from ceilings. Even an open rainbow-colored umbrella was featured. The media specialist contributed to the decor by wearing brightly colored clothes each day.

Furniture included tables and chairs, rockers of all sizes, a love seat, a sofa and tree stumps. The IMC was carpeted. Several plants were located in the IMC, and a fountain, normally found in someone's garden, complete with water-flow, was part of the decor. The numerous interest areas included a reading castle, and a wooden school, complete with mannequins dressed as pioneer children and old-fashioned desks. There was no doubt to the investigator that there were subjects of interest to the children.

Student work was featured as it related to activities that students performed in the interest areas in the IMC. This included weaving and other types of simple sewing.

In terms of the indicator, accessibility for small children, furniture was of different heights to accommodate primary-age children, and shelving heights in areas containing easy reading materials were three feet tall.

Physical indicators of the condition, feeling of value/ acceptance, were abundant at the urban IMC. These included: a corner of the IMC entitled "Corner of the Loving Heart" where materials on contributions of various ethnic/minority groups was represented; corkball over the circulation desk which featured over the school year the first name of every child in the school; poetry and posters applauding the life of the child; a sign featuring the word "love"; the media specialist's "Love Book," a book of pictures done by students.

Physical indicators of the condition, challenge, were also

seen. These included games such as chess, checkers, card catalog; interest tables such as one featuring information and completion sheets on Arbor Week; French words written on objects in the IMC. Like the rural and suburban IMC, materials in print and audiovisual format were available to children. Newspapers were not, however. Advanced material was located in the IMC, including reference materials such as an unabridged dictionary, often found in secondary school IMCs.

To summarize the urban IMC physical setting, examples were found in all categories which were indicators of positive atmosphere; feeling of value/acceptance; challenge.

Suburban school.

Of the school IMCs visited, the suburban school IMC was the least elaborate. In the examination of physical characteristics which could be said to be indicators of a positive atmosphere, the focus of senses will be discussed first. Indicators of materials/displays included the following: stuffed animals, models of fulcrum, screw, pulley, lever, wheel and axle; globes; model of distance of sun from earth; dioramas made by primary children. These provided examples of senses of sight and feel. Additional examples of sight stimulation included wall-sized displays on either side of the length of the IMC which were prepared throughout the year by classes and sometimes by the IMC. Other examples include attractive books open atop shelves and signs on shelves which identified IMC areas.

While this did not occur during the week of the study, the senses of taste, touch, smell and sight are stimulated at least

annually for first and second graders during "Mr. Rabbit's Tea Party" when cucumber sandwiches and other edible treats are prepared for the special celebration.

In terms of the location and accessibility of equipment and materials, all books and most audiovisual materials were located on open shelves throughout the IMC. Some audiovisual materials including more expensive sets were kept in the workroom. Students had access to all audiovisual materials, however. Heights of shelves were appropriate for the grade level utilizing them most often, with most shelves being at the three-foot high level.

Study carrels included electrically-wired ones. Equipment was found in study carrel areas and on selected tables. Equipment included filmloop projectors, cassette tape recorders with headsets, sound filmstrip projectors with headsets, individual filmstrip viewers. Audiovisual materials which utilized the equipment were often located nearby. Materials available included books, study prints, audiovisual materials, electronic games (spelling, math, etc.). Holiday books were especially accessible, for they were found in their own shelving area.

Design of the IMC which could be expected to invite/encourage student use was another indicator of a positive atmosphere. All of the features mentioned previously contributed to the IMC's decoration. In addition, furnishings included two rockers; a sofa located in the current magazine section; ten whistle seats; an alphabet pole with magnetic letters; carpeting throughout the IMC. A glassed display

case featured student work as well as displays designed by the media specialist. Shelf tops were also used for displays of student work from the classroom. The suburban IMC contained one interest table and no plants.

Accessibility within the IMC for primary age and older children alike was assured by the utilization of shelves at the three-foot level, equipment located at carrels and tables, and all books and most audiovisual materials located in the IMC.

The physical setting was also used to provide an indicator of the condition, feeling of value/acceptance. Student-made picture books were a permanent part of the section containing easy books. Displays of student work featured primary grade dioramas and intermediate grade salt maps. In one area of the IMC, a notebook was located so that primary-grade students could sign their names when they had read a book themselves. A few student drawings were taped to the side of the librarian's desk; student work was displayed on the hall walls on either side of the IMC.

In terms of the physical setting as an indicator of challenge to the student, the following were noted: electronic spelling and math games for use by students at all grade levels; a magnetic alphabetic pole containing lots of magnetized brightly colored letters. Kindergarten and other primary students could be challenged to write their names or spell other words. Models (fulcrum, screw, lever, wheel and axle, pulley) which could challenge students to learn about their operation and seek additional materials were atop shelves.

Globes of the world and two models focusing on the distance of the earth from the sun and the distance of all planets from the sun offered similar challenges.

The reference and periodicals sections contained reference materials found in high schools, including the Abridged Readers Guide. National Geographic magazines from 1949, and the index to Ranger Rick magazines were also available.

The card catalog was used as an area of challenge, as well. Atop the card catalog was a volume of the Random House Encyclopedia, Sears Guide to Subject Headings, district audiovisual catalog, and attractive signs reminding users how to handle words like "a, an, the, Mc, Mac," etc. Special sheets offering search strategies, including space for call numbers, and "how-to" for bibliographies were also located there.

To summarize the suburban IMC physical setting, examples were found in all categories which were indicators of positive atmosphere; feeling of value/acceptance; challenge.

Observation Instrument

The observation instrument (Appendix G) focused on the conditions of cooperation, independence and success. A total of 18 indicators of cooperation, 18 indicators of independence, and 3 indicators of success were found on the instrument. Prior to the study, a list was made of expected frequency of the indicators using the terms

often, sometimes, and occasionally. This was done because some IMC activities could be expected to occur more often than others. A predetermined agreement of the expected frequencies of occurrence would be important in the analysis of the indicators. A total of 592 observation sheets were included in the analysis. The number of disparate observations were caused by an afternoon's school program in the rural school, and general lack of activity at other times (see Table 2).

TABLE 2
Summary of Observation Sheets Utilized

Day	Rural	Urban	Suburban
Monday	50	40	41
Tuesday	45	42	35
Wednesday	34	45	37
Thursday	26	33	44
Friday	40	43	37
TOTAL	195	203	194

Inter-Observer Reliability

Two observers were utilized on the second day of the study in each IMC studied. The second observer was utilized to ascertain inter-observer reliability of the observation instrument.

In order to ascertain inter-observer reliability, Kappa coefficients were obtained for each school on the second day, using the formula $K = \frac{p_o - p_c}{1 - p_c}$, with p_o representing the proportion of units in which observers agreed and p_c representing the proportion of units for which agreement is expected by chance. The Kappa coefficients yielded the following data: rural school reliability between observers was .86; urban school reliability between observers was .87; and suburban school reliability between observers was .90.

These figures indicate that observations between the two observers were very consistent.

Anticipated Frequency of Occurrences of Activities Observed

A listing of the expected frequency of occurrences of IMC activities as listed on the observation model was developed by the researcher in consultation with the instructional media consultant, Michigan Department of Education. The frequency expectations are listed in Table 3.

Observation Model Review

Focusing on cooperation, the following activities were expected to occur often: going to the IMC together, browsing together, studying together, using audiovisual materials (see Table 4). A look at

TABLE 3

Expected Frequency of Occurrences

1. Often

Together
 Going to IMC
 Browsing
 Studying
 Using audiovisual material

Alone
 Going to IMC
 Using card catalog (grades 4-6)
 Browsing
 Selecting books
 Checking out books
 Returning materials
 Reading
 Studying
 Using audiovisual materials
 Using interest centers

Success

Location skills used in searching
 Satisfactory participation/completion of IMC activities

NOTE: Listings in "often" category were expected to occur several times during each day of the week, or around 20 observations per school.

2. Sometimes

Together
 Using card catalog (grades 2-4)
 Selecting books
 Reading
 Using audiovisual equipment
 Using interest centers
 Teaming
 Game playing
 Skills activities together

Alone
 Checking out audiovisual materials
 Using audiovisual equipment
 Using models

NOTE: Listings in "sometimes" category were expected to occur twice a day, or around 10 observations per school.

-- Continued --

TABLE 3 (Continued)

3. OccasionallyTogether

Checking out books (primary)

Checking out audiovisual materials (primary)

Returning materials (primary)

Production

Using models

Alone

Production

Success

Satisfactory participation/completion of IMC production

NOTE: Listings in "occasionally" category were expected to occur at least twice during the week, or around 2 observations per school.

TABLE 4

Expected Frequencies Compared to Actual Frequencies

Condition: Cooperation

Category: Often

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Going to IMC	60	-- Eliminated as a Category --			
Browsing	60	44	18	16	10
Studying	60	48	25	9	14
Using Audiovisual Materials	60	41	11	12	18

observation frequency results showed that the following activities were recorded most often: browsing together (44 time sheets); studying together (48 time sheets); using audiovisual materials (41 time sheets). None of the categories were recorded enough times to indicate that they occurred often. Thus, browsing together, studying, and using audiovisual materials can, on the whole, be said to occur sometimes. Going to the IMC was eliminated as a category after it was obvious that with the openness of the three IMCs, it was impossible to record this activity accurately.

All activities were reported at all three schools. Browsing together was recorded most frequently at the rural and urban schools (18 and 16 time sheets respectively compared to 10); studying together was recorded most frequently at the rural IMC (25 time sheets compared to 9 at the urban school and 14 at the suburban school); using audiovisual materials was recorded most frequently at the suburban school (18 time sheets compared to 11 at the rural school and 12 at the suburban school). Thus, none of the activities which were expected to occur often did so. They occurred sometimes according to the expected frequencies. The exception was "going to the IMC together," which was eliminated as a category.

The following activities in cooperation were expected to occur sometimes: using the card catalog together; selecting books; reading; using audiovisual equipment; using interest centers; teaming; game playing; skills activities together. A look at the observation frequency results showed that these activities were recorded with the

following frequency:

using card catalog together	= 16 time sheets
selecting books together	= 20 time sheets
reading together	= 30 time sheets
using audiovisual equipment together	= 20 time sheets
using interest centers together	= 35 time sheets
teaming	= 10 time sheets
game playing	= 14 time sheets
skills activities together	= 11 time sheets

Of those expected to occur sometimes, the use of interest centers together was recorded slightly more often than anticipated.

Using the card catalog together, selecting books together, using audiovisual equipment together, teaming, game playing, and skills activities were recorded less than expected.

All activities expected to occur sometimes were recorded at each school except for game playing together at the urban school (see Table 5). Using the card catalog together occurred together most often at the urban and suburban schools (7 time sheets each compared to 2 time sheets at the rural school); selecting books together occurred most often at the suburban school (10 time sheets compared to 6 time sheets at the rural school and 4 time sheets at the urban school); reading together was recorded most often at the urban school (13 time sheets compared to 10 at the suburban and 7 at the rural level). Using audiovisual equipment together occurred most often in the rural and suburban school (8 time sheets each compared to 4 time sheets at the urban level). Using interest centers together occurred most often at the urban and rural schools (21 time sheets and 13

TABLE 5

Expected Frequencies Compared to Actual Frequencies
 Condition: Cooperation
 Category: Sometimes

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Using Card Catalog	30	16	2	7	7
Selecting Books	30	20	6	4	10
Reading	30	30	7	13	10
Using All Equip- ment	30	20	8	4	8
Using Interest Centers	30	35	13	21	1
Teaming	30	10	8	0	2
Game Playing	30	14	1	0 ^a	13
Skills Activities Together	30	11	5	1	5

^aGame playing at the urban school was actually recorded under interest centers

time sheets respectively, with only one time sheet recorded for the suburban school). Teaming between older and younger children was expected to occur more often than it did in all schools. It occurred most often at the rural level, where middle school students tutored younger students, or eight time sheets, compared to two time sheets at the suburban and no time sheets recorded at the urban level. Of the three IMCs, the urban school maintained the most rigid schedule of classes, so that more students went to the IMC only for their weekly scheduled period. Game playing together was expected to occur

sometimes in all schools. It was recorded as occurring most often in the suburban school, where 13 out of the 14 recorded game sheets occurred here. The only other time sheet recording game playing together was in the rural school. While much chess, checkers, and the like were recorded at the urban school, they were recorded under the activity "interest centers" because of the numerous interest areas in the IMC, including game which included games as part of the interest area.

"Skills activities together" was expected to occur sometimes. Both the rural and suburban IMCs had five time sheets each, while only one skills activity together was recorded at the rural school IMC.

Thus, most activities which were expected to occur sometimes did not. The exceptions which occurred sometimes were "using interest centers together" and "reading together." "Using the card catalog together," "selecting books together," "using audiovisual equipment together," "teaming," and "skills activities together" occurred occasionally. "Game playing" occurred more often than was recorded since game playing was recorded within interest center activities at the urban school.

The following activities in cooperation were expected to occur occasionally: checking out books together; checking out audiovisual materials together; returning materials; production; using models (see Table 6). In this grouping, some activities which were expected to occur occasionally were not recorded at all. They were: checking out books together; returning materials together; and production.

TABLE 6

Expected Frequencies Compared to Actual Frequencies
 Condition: Cooperation
 Category: Occasionally

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Checking Out Books	6	0	0	0	0
Checking Out Audio-visual Materials	6	1	1	0	0
Returning Materials	6	0	0	0	0
Production	6	0	0	0	0
Using Models	6	5	0	2	3

Checking out audiovisual materials together was recorded only once, and that was at the rural school. Using models was the only activity that could be said to have almost occurred occasionally, as expected. The rural IMC had almost no models in the central IMC area; therefore, there were no recordings. The urban and suburban IMCs had two and three time sheets recorded, respectively.

Thus, discrepancies of the frequency of occurrences for the cooperation observation model occurred where activities were expected to occur were noted for all three categories. In most instances, activities expected to occur occasionally either did not occur at all or too infrequently to be said to occur occasionally. Activities expected to occur often generally occurred sometimes and those expected to occur sometimes generally occurred occasionally.

Focusing on independence, the following activities were

expected to occur often:

Going to the IMC
Using the card catalog
Browsing
Selecting books
Returning materials
Reading
Studying
Using audiovisual materials
Using interest centers

The category "going to the IMC" was eliminated after it became obvious to the investigators and the observers that the openness of the three IMCs made it impossible to record accurately (see Table 7).

TABLE 7

Expected Frequencies Compared to Actual Frequencies
Condition: Independence
Category: Often

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Going to IMC	60	-- Eliminated as a Category --			
Using Card Catalog	60	51	21	13	17
Browsing	60	92	33	37	22
Selecting Books	60	65	25	13	27
Checking Out Books	60	72	23	21	28
Returning Materials	60	54	12	20	22
Reading	60	89	26	37	26
Studying	60	92	45	15	32
Using Audiovisual Materials	60	50	20	12	18
Using Interest Centers	60	71	27	42	2

A look at the observation frequency results showed that the remaining activities were recorded with the following frequency:

Using the card catalog	= 51
Browsing	= 92
Selecting books	= 65
Checking out books	= 72
Returning materials	= 54
Reading	= 89
Studying	= 92
Using audiovisual materials	= 50
Using interest centers	= 71

As can be readily noted, more recordings of indicators of independence were made as compared to indicators of cooperation.

There was greater use of the card catalog independently at the rural and suburban schools (21 and 17 time sheets respectively, compared to 13 time sheets for the urban school). Activity at the urban school centered heavily upon the paperback book exchange interest center.

Browsing alone was recorded most frequently at the urban and rural schools (37 and 33 time sheets respectively, compared to 22 time sheets for the suburban school). Selecting books alone occurred most frequently at the suburban and rural schools (27 and 25 time sheets respectively, compared to 13 time sheets at the urban school). In addition to the paperback book exchange at the urban school, other activities such as the Maypole Dance could be expected to affect the normal IMC program. Checking out books occurred with similar frequency in all schools (28, 23, and 21 time sheets for suburban, rural and urban schools respectively). Returning materials independently was

recorded most often in the suburban and urban schools (22 and 20 time sheets respectively, compared to 12 at the rural school). At the rural school, primary grade students spent the first part of the week practicing for the art program, so it was possible that they had fewer opportunities to use the materials that they had.

Reading occurred frequently in all schools, with the urban IMC having 37 time sheets recorded, followed by 26 time sheets for each of the rural and suburban schools. Studying occurred frequently at both the rural and suburban schools (i.e., 45 and 32 time sheets, respectively), compared to only 15 recorded time sheets for the urban school. This was expected, since urban students had fewer opportunities to use the IMC during the week and because of special interest center activities featured the week of the study.

Using audiovisual materials occurred frequently at the rural and suburban schools (i.e., 20 and 18 time sheets respectively), compared to only 12 recorded time sheets at the urban school. Again, suggested reasons in the previous paragraph would be appropriate here.

Use of interest centers alone occurred most frequently in the urban IMC, followed by the rural IMC (42 and 27 time sheets, respectively). The suburban time sheet record of two is not surprising since only one interest center was featured at the suburban IMC.

Thus, the observed activities expected to occur often generally did, with the exception of the category "going to the IMC," which had to be eliminated. Three categories, "using the card catalog," "returning materials," and "using audiovisual materials" occurred

following frequency:

using card catalog together	= 16 time sheets
selecting books together	= 20 time sheets
reading together	= 30 time sheets
using audiovisual equipment together	= 20 time sheets
using interest centers together	= 35 time sheets
teaming	= 10 time sheets
game playing	= 14 time sheets
skills activities together	= 11 time sheets

Of those expected to occur sometimes, the use of interest centers together was recorded slightly more often than anticipated.

Using the card catalog together, selecting books together, using audiovisual equipment together, teaming, game playing, and skills activities were recorded less than expected.

All activities expected to occur sometimes were recorded at each school except for game playing together at the urban school (see Table 5). Using the card catalog together occurred together most often at the urban and suburban schools (7 time sheets each compared to 2 time sheets at the rural school); selecting books together occurred most often at the suburban school (10 time sheets compared to 6 time sheets at the rural school and 4 time sheets at the urban school); reading together was recorded most often at the urban school (13 time sheets compared to 10 at the suburban and 7 at the rural level). Using audiovisual equipment together occurred most often in the rural and suburban school (8 time sheets each compared to 4 time sheets at the urban level). Using interest centers together occurred most often at the urban and rural schools (21 time sheets and 13

slightly less than expected. Some differences by school were noted.

Focusing on independence, the following activities were expected to occur sometimes:

Checking out audiovisual materials
Using audiovisual equipment
Using models

None of the activities in this area occurred as expected (see Table 8). Audiovisual materials were not generally checked out at any of the three IMCs. Hence, there was only one time sheet recorded at the urban and rural school. No audiovisual material checkout by students was recorded at the suburban school. Audiovisual materials were used on-site.

TABLE 8

Expected Frequencies Compared to Actual Frequencies
Condition: Independence
Category: Sometimes

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Checking Out Audiovisual Materials	30	2	1	1	0
Using Audiovisual Equipment	30	58	21	15	22
Using Models	30	8	1	2	5

Audiovisual equipment utilization was higher than expected. The suburban and rural schools had 22 and 21 time sheets respectively,

followed by 15 time sheets at the urban level. Models were used most often at the suburban school where there were more on hand, but use of models for all schools was less than expected (5 for suburban, 2 for urban, and 1 for rural).

Focusing on independence, the following activity was expected to occur occasionally: production (see Table 9). No production was recorded at either the urban or suburban schools, while the rural school had two recorded incidences of laminating by audiovisual club members.

TABLE 9

Expected Frequencies Compared to Actual Frequencies
Condition: Independence
Category: Occasionally

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Production	6	2	2	0	0

To summarize, the focus on independence yielded a considerable number of occurrences which were recorded often, including an unanticipated one. Browsing, selecting books, checking out books, returning materials, reading, studying, and using interest centers, as expected, were recorded often. In addition, audiovisual equipment use occurred often. Those activities which were recorded as occurring less than expected were using the card catalog, using audiovisual

materials, checking out audiovisual materials, using models, and production.

Focusing on success, the following activities were expected to occur often:

Location skills used in searching
Satisfactory participation/completion of IMC activities

Because of the steps involved in following a student's location skills in searching, this category was only used occasionally by the observers when focusing on individual students. Its representation with 13 time sheets for the three schools was the result. This indicator was eliminated from analysis because of the manner in which the information was recorded.

Satisfactory participation/completion of IMC activities included the recording of activities from "checking out books" and "playing games." It was found to occur quite frequently, especially in the suburban school where 77 of the 177 time sheets were found, leaving the rural and suburban levels at 51 and 49 time sheets, respectively.

Satisfactory participation/completion of an IMC production was expected to occur occasionally. However, since the only production occurred twice at the rural level during the study, this indicator occurred far less than expected.

Thus, of the two indicators of success expected to occur often, one was eliminated and the other, "satisfactory participation/completion of IMC activities," occurred very often. The indicator,

"satisfactory participation/completion of an IMC production," occurred less than occasionally, which had been expected (see Tables 10 and 11).

TABLE 10

Expected Frequencies Compared to Actual Frequencies
Condition: Success
Category: Often

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Location Skills	60	-- Eliminated as a Category --			
Satisfactory participation/completion of IMC activity	60	177	51	49	77

TABLE 11

Expected Frequencies Compared to Actual Frequencies
Condition: Success
Category: Occasionally

<u>Activity</u>	<u>Expected</u>	<u>Actual</u>	<u>Rural</u>	<u>Urban</u>	<u>Suburban</u>
Satisfactory participation/completion of an IMC activity	6	2	2	0	0

Observation Model Analysis of Variance

In order to look more carefully in a statistical manner at the raw data generated by the observation sheets, two two-way analyses of variance (anova) were performed on 18 of the 39 activities observed. The 18 activities were selected for further study based on the frequency of recorded occurrences. Under the area of cooperation, the activities which received further analysis based on frequency of occurrence were browsing together, selecting books together, reading together, studying together, using audiovisual materials together, using audiovisual equipment together, and using interest centers. In the area of independence, the following activities which received further analysis based on frequency of occurrence were: using the card catalog alone, browsing alone, selecting books alone, checking out books alone, returning materials alone, reading alone, studying alone, using audiovisual materials alone, using audiovisual equipment alone, and using interest centers alone. Under the area of success, satisfactory participation/completion of IMC activities was selected for further analysis.

The two-way analyses of variance (anovas) were performed. The first anova performed was a 3 x 5, in which the variables school and day were treated as independent variables and each activity was treated as the dependent variable (see Figure 2). Significance levels at the .05 level were sought by school, by day, and by two-way interaction (see Tables 12 through 18, pages 133-136). The following

FIGURE 2

Analysis of Variance: School by Day

	Rural	Urban	Suburban
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			

was found to be statistically significant by school at the .05 level: studying together. Studying together was significant at the .007 level (see Table 15, page 134). A Scheffé was then performed on the dependent variable, studying together. The rural school, which had more recorded instances of studying together, was found to be statistically different from the urban school (see Scheffé Table 19, page 137).

Statistical significance by school was also found for the following independence variables: selecting books alone (.043); studying alone (.000); using interest centers alone (.000) (see Tables 20-29, pages 138-142). A Scheffé was then performed on these three variables (see Tables 30-32, pages 143-144). SPSS performs only one-way Scheffés, so the two-way anova was strung out for further analysis. In "studying alone," both the rural and the suburban school IMC differed significantly from the urban school IMC, where little studying

was recorded. In using interest centers alone, the rural and urban schools differed significantly from the suburban school where only one interest center was found. A Scheffé on the remaining variable, "selecting books alone," where statistical significance was found at the .05 level, yielded no two groups as significantly different at the .05 level.

Finally, statistical significance by school was found for the success variable, "satisfactory completion of IMC activities," at the .001 level (see Table 33, page 145). A one-way Scheffé showed that the suburban school, with a greater number of observation sheets recorded in this area, differed significantly from the rural and urban schools (see Table 34, page 146).

The day of the week was significant only for the cooperation variable, "using audiovisual equipment together" (see Table 17, page 135). The two-way school by day anova showed significance by day at the .029 level. However, a one-way Scheffé showed that no two groups were significantly different at the .05 level (see Table 35, page 147).

The two-way anova performed on independent variables school by day for the 18 activities selected for further study yielded two interactions of significance at the .05 level: studying alone (.003) and using audiovisual materials alone (.050) (see Tables 26-27, page 141). One-way Scheffés showed that in both activities, no two groups were significantly different at the .05 level (see Tables 36-37, pages 148-149).

A summary of the findings of the two-way analysis of variance

of school by day performed on the 18 activities selected for further study will be given. The following activities were found to be significant by school at the .05 level:

- Studying together
- Selecting books alone
- Studying alone
- Using interest centers alone
- Satisfactory participation/completion of IMC activity

Only the activity, "using audiovisual equipment together," was found to be significant by day.

Finally, two variables showed two-way interaction significance of school by day. These were "studying alone" and "using audiovisual materials alone."

The second two-way anova performed was a 3 x 3, in which the variables school and level were treated as independent variables and each of the 18 activities selected for further study was treated as the dependent variable (see Figure 3). The three levels were defined as follows: primary - grades K-3; intermediate - grades 4-6; and primary/intermediate - any combination of primary and intermediate. The purpose of this two-way anova was to determine whether statistical variance existed according to the grade range of the students. Results showed more activities showing statistical significance at the .05 level than in the day by school analysis of variance (see Tables 38-44, pages 150-153).

FIGURE 3

Analysis of Variance: School by Level

	Rural	Urban	Suburban
Level 1 (K-3)			
Level 2 (4-6)			
Level 3 (Combination)			

The following cooperation components were found to be statistically significant by school at the .05 level: studying together (.007) (see Table 41, page 151). A one-way Scheffé was then performed on the activity, studying together. The rural school IMC was found to be statistically different from the urban school (see Table 19, page 137).

The following independence components were found to be statistically significant by school at the .05 level: studying alone (.000); using interest centers alone (.000); selecting books alone (.044) (see Tables 45-54, pages 154-158). A one-way Scheffé was then performed on each of the three activities showing statistical significance at the .05 level. In the activity, "studying alone," both rural and suburban IMCs showed more evidence of studying alone than the urban IMC (see Table 31, page 143). In the activity, "using interest centers alone," both the rural and urban IMCs showed more evidence of interest center use than the suburban IMC (see Table 32, page 144). In "selecting books alone," no two groups differed significantly (see Table 30, page 143).

The following success component was found to be statistically significant by school at the .05 level: satisfactory participation/completion of IMC activity at the .003 level (see Table 55, page 159). A one-way Scheffé which followed indicated that the suburban school showed greater frequency of success indicators than the rural and urban schools (see Table 34, page 146).

The following cooperation components were found to be statistically significant by level (primary, intermediate, or a combination thereof) at the .05 level: studying together (.033); using audiovisual materials together (.008); using audiovisual equipment together (.000) (see Tables 41-43, pages 151-152). A one-way Scheffé was then performed on each activity. For the activity, "using audiovisual materials," it was found that primary grade students used audiovisual materials together more than intermediate or primary/intermediate students (see Table 56, page 160). For the activity, "studying together," it was found that intermediate grade students studied more together than primary grade students (see Table 57, page 160). For the activity, "using audiovisual equipment together," it was found that primary grade students used audiovisual equipment together more than intermediate or primary/intermediate students (see Table 58, page 161).

The following independence components were found to be statistically significant by level at the .05 level: "checking out books alone" (.004); "returning materials alone" (.000); "reading alone" (.039); and "studying alone" (.000) (see Tables 48-51, pages 155-157).

One-way Scheffés on each of the above activities yielded further interpretative results (see Tables 59-62, pages 161-163). It was found that primary/intermediate groups checked out books alone more than either primary or intermediate grades separately. Likewise, primary/intermediate groups returned books more than either primary or intermediate grades separately. No groups showed significant variance in the Scheffé performed on "reading alone." In the activity, "studying alone," the intermediate grade level was found to study alone more than the primary grade level.

The two-way anova on the independent variables school by level for the 18 activities selected for study yielded 10 interactions of significance at the .05 level. In the area of cooperation, they were: studying together (.029); using audiovisual materials together (.002); using audiovisual equipment together (.005) (see Tables 41-43, pages 151-152). Scheffés were then performed on each of the above. No significant variation among groups was found for the activities "studying together" and "using audiovisual equipment together" (see Tables 63-64, pages 164-165). In the activity, "using audiovisual materials," there was significant difference between the suburban school's use of audiovisual materials at the primary and intermediate levels (see Table 65, page 166). Primary grades used audiovisual materials more together than did intermediates at that school.

In the area of independence, school by level interactions at the .05 significance level were: using the card catalog alone (.004); returning materials alone (.000); reading alone (.014); studying alone

(.000); using audiovisual materials alone (.005); using audiovisual equipment alone (.000) (see Tables 45, 49-51, pages 154, 156-157). One-way Scheffés were then performed on each of these dependent variables (see Tables 66-71, pages 167-172). No significant variation among groups was found for activities using the card catalog alone; reading alone; using audiovisual materials alone. The activity, "returning materials alone" showed that the suburban school, primary/intermediate levels, had more recorded returns of materials than any of the other schools and levels (see Table 67, page 168).

The activity, "studying alone," showed that the rural and suburban schools at the intermediate levels differed from the suburban school's primary level, and the urban school's intermediate grade level (see Table 69, page 170). The activity, "using audiovisual equipment alone," showed that the suburban school at the primary level differed from the urban school at the primary level, for there was more independent use of audiovisual equipment at the suburban level by primary students (see Table 71, page 172).

In the success area, the following component was found to be statistically significant at the .05 level: satisfactory participation/completion of IMC activities (see Table 55, page 159). A one-way Scheffé showed that the suburban school and its primary/intermediate level had more recorded success than any of the other groups examined (see Table 72, page 173).

A summary of the findings of the two-way analysis of variance of school by level performed on the 18 activities selected for further

study will be given. The following activities were found to be significant by school at the .05 level:

- Studying together
- Studying alone
- Using interest centers alone
- Selecting books alone
- Satisfactory participation/completion of IMC activities

The following activities were found to be significant by level at the .05 level:

- Studying together
- Using audiovisual equipment together
- Using audiovisual materials together
- Checking out books alone
- Returning materials alone
- Reading alone
- Studying alone

Finally, the following activities showed two-way interaction significance of school by level:

- Studying together
- Using audiovisual materials together
- Using audiovisual equipment together
- Using the card catalog alone
- Returning materials alone
- Reading alone
- Studying alone
- Using audiovisual materials alone
- Using audiovisual equipment alone
- Satisfactory participation/completion of IMC activities

TABLE 12

Analysis of Variance for the Condition of Cooperation
 School by Day
 Activity: Browsing Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.046	.665	.678
Day	4	.027	.395	.812
School	2	.095	1.364	.257
2-Way Interactions	8	.038	.544	.824
Day School	8	.038	.544	.824
Total Sum of Squares	40.730			
Residual	40.149			

TABLE 13

Analysis of Variance for the Condition of Cooperation
 School by Day
 Activity: Selecting Books Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.028	.851	.531
Day	4	.016	.487	.745
School	2	.047	1.447	.236
2-Way Interactions	8	.036	1.096	.364
Day School	8	.036	1.096	.364
Total Sum of Squares	19.324			
Residual	18.871			

TABLE 14

Analysis of Variance for the Condition of Cooperation
 School by Day
 Activity: Reading Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.065	1.355	.231
Day	4	.078	1.623	.167
School	2	.036	.737	.479
2-Way Interactions	8	.032	.654	.732
Day School	8	.032	.654	.732
Total Sum of Squares	28.480			
Residual	27.835			

TABLE 15

Analysis of Variance for the Condition of Cooperation
 School by Day
 Activity: Studying Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.141	1.901	.079
Day	4	.030	.412	.800
School	2	.374	5.050	.007
2-Way Interactions	8	.067	.904	.512
Day School	8	.067	.904	.512
Total Sum of Squares	44.108			
Residual	42.728			

TABLE 16

Analysis of Variance for the Condition of Cooperation
 School by Day
 Activity: Using Audiovisual Materials Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.086	1.324	.244
Day	4	.088	1.366	.244
School	2	.096	1.480	.229
2-Way Interactions	8	.040	.614	.767
Day School	8	.040	.614	.767
Total Sum of Squares	38.160			
Residual	37.329			

TABLE 17

Analysis of Variance for the Condition of Cooperation
 School by Day
 Activity: Using Audiovisual Equipment Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.069	2.137	.048
Day	4	.088	2.729	.029
School	2	.032	1.012	.364
2-Way Interactions	8	.051	1.594	.123
Day School	8	.051	1.594	.123
Total Sum of Squares	19.324			
Residual	18.504			

TABLE 18
 Analysis of Variance for the Condition of Cooperation
 School by Day
 Activity: Using Interest Centers Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.198	3.622	.002
Day	4	.053	.967	.425
School	2	.503	9.221	.000
2-Way Interactions	8	.032	.581	.794
Day School	8	.032	.581	.794
Total Sum of Squares	32.931			
Residual	31.491			

TABLE 19

Type of School Scheffé on Condition of Cooperation,
"Studying Together"

Group	Count	Mean	Standard Deviation	Standard Error
Rural	195	.1282	.3352	.0240
Suburban	194	.0722	.2594	.0186
Urban	203	.0443	.2063	.0145
TOTAL	592	.0811	.2732	.0112
		Fixed Effects Model	.2714	.0112
		Random Effects Model		.0247

Explanation: The rural school IMC is found to be statistically significant from the urban school.

TABLE 20

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Using the Card Catalog Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.455	.962	.450
Day	4	.265	.841	.500
School	2	.196	1.244	.289
2-Way Interactions	8	.631	.999	.435
Day School	8	.631	.999	.435
Total Sum of Squares	46.606			
Residual	45.520			

TABLE 21

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Browsing Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.193	1.400	.212
Day	4	.127	.925	.449
School	2	.310	2.257	.106
2-Way Interactions	8	.068	.498	.858
Day School	8	.068	.498	.858
Total Sum of Squares	81.074			
Residual	79.371			

TABLE 22

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Selecting Books Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.130	1.321	.246
Day	4	.030	.306	.876
School	2	.311	3.161	.043
2-Way Interactions	8	.044	.447	.893
Day School	8	.044	.447	.893
Total Sum of Squares	57.863			
Residual	56.733			

TABLE 23

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Checking Out Books Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.050	.461	.837
Day	4	.032	.300	.878
School	2	.074	.683	.505
2-Way Interactions	8	.054	.502	.855
Day School	8	.054	.502	.855
Total Sum of Squares	63.243			
Residual	62.509			

TABLE 24

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Returning Materials Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.055	.659	.683
Day	4	.012	.150	.963
School	2	.140	1.690	.185
2-Way Interactions	8	.110	1.320	.230
Day School	8	.110	1.320	.230
Total Sum of Squares	49.074			
Residual	47.870			

TABLE 25

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Reading Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.096	.751	.609
Day	4	.065	.509	.729
School	2	.160	1.254	.286
2-Day Interactions	8	.174	1.363	.210
Day School	8	.174	1.363	.210
Total Sum of Squares	75.620			
Residual	73.653			

TABLE 26

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Studying Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.473	3.795	.001
Day	4	.091	.729	.572
School	2	1.239	9.939	.000
2-Way Interactions	8	.369	2.962	.003
Day School	8	.369	2.962	.003
Total Sum of Squares	77.703			
Residual	71.911			

TABLE 27

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Using Audiovisual Materials Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.043	.524	.790
Day	4	.035	.427	.789
School	2	.055	.668	.513
2-Way Interactions	8	.162	1.952	.050
Day School	8	.162	1.952	.050
Total Sum of Squares	49.432			
Residual	47.876			

TABLE 28

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Using Audiovisual Equipment Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.134	1.525	.168
Day	4	.155	1.768	.134
School	2	.099	1.133	.323
2-Way Interactions	8	.113	1.283	.250
Day School	8	.113	1.283	.250
Total Sum of Squares	52.317			
Residual	50.615			

TABLE 29

Analysis of Variance for the Condition of Independence
 School by Day
 Activity: Using Interest Centers Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.677	6.731	.000
Day	4	.032	.318	.866
School	2	.905	18.946	.000
2-Way Interactions	8	.050	.495	.860
Day School	8	.050	.495	.860
Total Sum of Squares	62.485			
Residual	58.025			

TABLE 30

Type of School Scheffé on Condition of Independence,
"Selecting Books Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural	195	.1283	.3352	.0240
Suburban	194	.1396	.3470	.0249
Urban	203	.0640	.2454	.0172
TOTAL	592	.1098	.3129	.0129
		Fixed Effects Model	.3116	.0128
		Random Effects Model		.0236

Explanation: No two groups are significantly different.

TABLE 31

Type of School Scheffé on Condition of Independence,
"Studying Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural	195	.2308	.4224	.0302
Suburban	194	.1649	.3721	.0267
Urban	203	.0739	.2622	.0184
TOTAL	592	.1554	.3626	.0149
		Fixed Effects Model	.3574	.0147
		Random Effects Model		.0457

Explanation: Both the rural and suburban school IMCs differ significantly from the urban IMC.

TABLE 32
Type of School Scheffé on Condition of Independence,
"Using Interest Centers Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural	195	.1385	.3463	.0248
Suburban	194	.0103	.1013	.0073
Urban	203	.2069	.4061	.0285
TOTAL	592	.1199	.3252	.0134
		Fixed Effects Model	.3153	.0130
		Random Effects Model		.0577

Explanation: The rural and urban schools differ significantly from the suburban school.

TABLE 33

Analysis of Variance for the Condition of Success
 School by Day
 Activity: Satisfactory Participation/Completion of IMC Activities

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	6	.682	3.329	.003
Day	4	.322	1.570	.181
School	2	1.519	7.411	.001
2-Way Interactions	8	.211	1.027	.414
Day School	8	.211	1.027	.414
Total Sum of Squares	124.079			
Residual	118.300			

TABLE 34

Type of School Scheffé on Condition of Success,
 "Satisfactory Participation/Completion of IMC Activities"

Group	Count	Mean	Standard Deviation	Standard Error
Rural	195	.2615	.4406	.0316
Suburban	194	.3969	.4905	.0352
Urban	203	.2414	.4290	.0301
TOTAL	592	.2990	.4582	.0188
	Fixed Effects Model		.4538	.0186
	Random Effects Model			.0487

Explanation: The suburban school differs significantly from the rural and urban schools.

TABLE 35

Day of Week Scheffé on Condition of Cooperation Variable,
"Using Audiovisual Equipment Together"

Group	Count	Mean	Standard Deviation	Standard Error
Monday	131	.0229	.1502	.0131
Tuesday	122	.0574	.2335	.0211
Wednesday	116	.0086	.0928	.0086
Thursday	103	.0097	.0985	.0097
Friday	120	.0667	.2505	.0229
TOTAL	592	.0338	.1808	.0074
		Fixed Effects Model	.1798	.0074
		Random Effects Model		.0121

Explanation: No two groups are significantly different at the .05 level.

TABLE 36

School by Day Scheffé on Condition of Independence,
"Studying Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, Day 1	50	.2800	.4536	.0641
Rural, Day 2	45	.2000	.4045	.0603
Rural, Day 3	34	.4118	.4996	.0857
Rural, Day 4	26	.0385	.1961	.0385
Rural, Day 5	40	.1750	.3848	.0608
Suburban, Day 1	41	.1220	.3313	.0517
Suburban, Day 2	35	.1714	.3824	.0646
Suburban, Day 3	37	.1081	.3148	.0518
Suburban, Day 4	44	.1591	.3700	.0558
Suburban, Day 5	37	.2703	.4502	.0740
Urban, Day 1	40	.0500	.2207	.0349
Urban, Day 2	42	.1429	.3542	.0546
Urban, Day 3	45	.0667	.2523	.0376
Urban, Day 4	33	.0909	.2919	.0508
Urban, Day 5	43	.0233	.1525	.0233
TOTAL	592	.1554	.3626	.0149
Fixed Effects Model			.3530	.0145
Random Effects Model				.0266

Explanation: No two groups are significantly different at the .05 level.

TABLE 37

School by Day Scheffé on Condition of Independence,
"Using Audiovisual Materials Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, Day 1	50	.0600	.2399	.0339
Rural, Day 2	45	.1556	.3665	.0546
Rural, Day 3	34	.0882	.2879	.0494
Rural, Day 4	26	.1154	.3258	.0639
Rural, Day 5	40	.1000	.3038	.0480
Suburban, Day 1	41	.0488	.2181	.0341
Suburban, Day 2	35	.0857	.2840	.0480
Suburban, Day 3	37	.1081	.3148	.0518
Suburban, Day 4	44	.0909	.2908	.0438
Suburban, Day 5	37	.1351	.3466	.0570
Urban, Day 1	40	.2000	.4641	.0734
Urban, Day 2	42	.0238	.1543	.0238
Urban, Day 3	45	.0222	.1491	.0222
Urban, Day 4	33	.0000	.0000	.0000
Urban, Day 5	43	.0930	.2939	.0448
TOTAL	592	.0878	.2892	.0119
Fixed Effects Model			.2881	.0118
Random Effects Model				.0137

Explanation: No two groups are significantly different at the .05 level.

TABLE 38

Analysis of Variance for the Condition of Cooperation
 School by Level
 Activity: Browsing Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.101	1.466	.211
Level	2	.118	1.715	.181
School	2	.086	1.243	.289
2-Way Interactions	4	.026	.371	.829
Level School	4	.026	.371	.829
Total Sum of Squares	40.730			
Residual	40.223			

TABLE 39

Analysis of Variance for the Condition of Cooperation
 School by Level
 Activity: Selecting Books Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.032	.975	.420
Level	2	.012	.365	.694
School	2	.045	1.377	.253
2-Way Interactions	4	.055	1.688	.151
Level School	4	.055	1.688	.151
Total Sum of Squares	19.324			
Residual	18.978			

TABLE 40

Analysis of Variance for the Condition of Cooperation
 School by Level
 Activity: Reading Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.285	6.142	.000
Level	2	.531	11.434	.000
School	2	.047	1.014	.363
2-Way Interactions	4	.063	1.360	.247
Level School	4	.063	1.360	.247
Total Sum of Squares	28.480			
Residual	27.086			

TABLE 41

Analysis of Variance for the Condition of Cooperation
 School by Level
 Activity: Studying Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.305	4.224	.002
Level	2	.249	3.446	.033
School	2	.363	5.021	.007
2-Way Interactions	4	.196	2.714	.029
Level School	4	.196	2.714	.029
Total Sum of Squares	44.108			
Residual	42.104			

TABLE 42

Analysis of Variance for the Condition of Cooperation
School by Level

Activity: Using Audiovisual Materials Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.194	3.109	.015
Level	2	.307	4.930	.008
School	2	.043	.695	.500
2-Way Interactions	4	.266	4.276	.002
Level School	4	.266	4.276	.002
Total Sum of Squares	38.160			
Residual	36.320			

TABLE 43

Analysis of Variance for the Condition of Cooperation
School by Level

Activity: Using Audiovisual Equipment Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.138	4.394	.002
Level	2	.245	7.813	.000
School	2	.027	.850	.428
2-Way Interactions	4	.118	3.770	.005
Level School	4	.118	3.770	.005
Total Sum of Squares	19.324			
Residual	18.299			

TABLE 44

Analysis of Variance for the Condition of Cooperation
 School by Level
 Activity: Using Interest Centers Together

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.263	4.836	.001
Level	2	.039	.713	.490
School	2	.492	9.045	.000
2-Way Interactions	4	.038	.692	.598
Level School	4	.038	.692	.598
Total Sum of Squares	32.931			
Residual	31.728			

TABLE 45

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Using the Card Catalog Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.079	1.022	.395
Level	2	.063	.815	.443
School	2	.097	1.248	.288
2-Way Interactions	4	.300	3.874	.004
Level School	4	.300	3.874	.004
Total Sum of Squares	46.606			
Residual	45.091			

TABLE 46

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Browsing Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.360	2.646	.033
Level	2	.396	2.914	.055
School	2	.372	2.737	.066
2-Way Interactions	4	.093	.688	.601
Level School	4	.093	.688	.601
Total Sum of Squares	81.074			
Residual	79.261			

TABLE 47

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Selecting Books Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.181	1.859	.116
Level	2	.034	.343	.709
School	2	.307	3.142	.044
2-Way Interactions	4	.065	.666	.616
Level School	4	.065	.666	.616
Total Sum of Squares	57.863			
Residual	56.878			

TABLE 48

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Checking Out Books Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.340	3.239	.012
Level	2	.594	5.668	.004
School	2	.101	.963	.382
2-Way Interactions	4	.190	1.814	.125
Level School	4	.190	1.814	.125
Total Sum of Squares	63.243			
Residual	61.124			

TABLE 49

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Returning Materials Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.668	8.773	.000
Level	2	1.197	15.721	.000
School	2	.170	2.232	.108
2-Way Interactions	4	.499	6.553	.000
Level School	4	.499	6.553	.000
Total Sum of Squares	49.079			
Residual	44.405			

TABLE 50

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Reading Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.282	2.254	.062
Level	2	.406	3.249	.039
School	2	.177	1.416	.243
2-Way Interactions	4	.393	3.140	.014
Level School	4	.393	3.140	.014
Total Sum of Squares	75.620			
Residual	72.921			

TABLE 51

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Studying Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	1.240	10.323	.000
Level	2	1.243	10.347	.000
School	2	1.339	11.147	.000
2-Way Interactions	4	.680	5.663	.000
Level School	4	.680	5.663	.000
Total Sum of Squares	77.022			
Residual	70.703			

TABLE 52

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Using Audiovisual Materials Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.083	1.011	.401
Level	2	.106	1.296	.274
School	2	.060	.733	.481
2-Way Interactions	4	.305	3.709	.005
Level School	4	.305	3.709	.005
Total Sum of Squares	49.432			
Residual	47.882			

TABLE 53

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Using Audiovisual Equipment Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.152	1.780	.131
Level	2	.214	2.495	.083
School	2	.075	.876	.417
2-Way Interactions	4	.443	5.173	.000
Level School	4	.443	5.173	.000
Total Sum of Squares	52.317			
Residual	49.935			

TABLE 54

Analysis of Variance for the Condition of Independence
 School by Level
 Activity: Using Interest Centers Alone

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	1.083	10.984	.000
Level	2	.199	2.022	.133
School	2	1.804	18.295	.000
2-Way Interactions	4	.167	1.690	.151
Level School	4	.167	1.690	.151
Total Sum of Squares	62.485			
Residual	57.486			

TABLE 55

Analysis of Variance for the Condition of Success
 School by Level
 Activity: Satisfactory Participation/Completion of IMC Activities

Source	Degrees of Freedom	Mean Square	F-Ratio	Significance of F
Main Effects	4	.944	4.750	.001
Level	2	.485	2.439	.088
School	2	1.184	5.956	.003
2-Way Interactions	4	1.102	5.541	.000
Level School	4	1.102	5.541	.000
Total Sum of Squares	124.079			
Residual	115.896			

TABLE 56

School Level Scheffé on Condition of Cooperation,
"Using Audiovisual Materials Together"

Group	Count	Mean	Standard Deviation	Standard Error
K-3	160	.1250	.3318	.0262
4-6	335	.0507	.2198	.0120
Combination	97	.0412	.1999	.0203
TOTAL	592	.0693	.2541	.0104
		Fixed Effects Model	.2522	.0104
		Random Effects Model		.0282

Explanation: Primary grade use of audiovisual materials is significantly different from grades 4-6 and combination.

TABLE 57

School Level Scheffé on Condition of Cooperation,
"Studying Together"

Group	Count	Mean	Standard Deviation	Standard Error
K-3	160	.0375	.1906	.0151
4-6	335	.1045	.3063	.0167
Combination	97	.0722	.2601	.0264
TOTAL	592	.0811	.2732	.0112
		Fixed Effects Model	.2721	.0112
		Random Effects Model		.0234

Explanation: Intermediate grade students study more than primary grade students.

TABLE 58

School Level Scheffé on Condition of Cooperation,
"Using Audiovisual Equipment Together"

Group	Count	Mean	Standard Deviation	Standard Error
K-3	160	.0812	.2741	.0217
4-6	335	.0179	.1328	.0073
Combination	97	.0103	.1015	.0103
TOTAL	592	.0338	.1808	.0074
		Fixed Effects Model	.1788	.0073
		Random Effects Model		.0242

Explanation: Grades K-3 differ significantly from grades 4-6 and the combination of grades.

TABLE 59

School Level Scheffe on Condition of Independence,
"Checking Out Books Alone"

Group	Count	Mean	Standard Deviation	Standard Error
K-3	160	.0812	.2741	.0217
4-6	335	.1134	.3176	.0174
Combination	97	.2165	.4140	.0420
TOTAL	592	.1216	.3271	.0134
		Fixed Effects Model	.3247	.0133
		Random Effects Model		.0365

Explanation: Combination of grades K-3 and 4-6 differ significantly from grades K-3 and 4-6 separately.

TABLE 60

School Level Scheffé on Condition of Independence,
"Returning Materials Alone"

Group	Count	Mean	Standard Deviation	Standard Error
K-3	160	.0938	.2924	.0231
4-6	335	.0507	.2198	.0120
Combination	97	.2268	.4209	.0427
TOTAL	592	.0912	.2882	.0118
		Fixed Effects Model	.2817	.0116
		Random Effects Model		.0529

Explanation: Combination of grades K-3 and 4-6 differs significantly
from grades K-3 and 4-6 separately.

TABLE 61

School Level Scheffé on Condition of Independence,
"Reading Alone"

Group	Count	Mean	Standard Deviation	Standard Error
K-3	160	.2062	.4059	.0321
4-6	335	.1373	.3447	.0188
Combination	97	.1031	.3057	.0310
TOTAL	592	.1503	.3577	.0147
		Fixed Effects Model	.3565	.0147
		Random Effects Model		.0292

Explanation: No two groups are significantly different at the .05
level.

TABLE 62
School Level Scheffé on Condition of Independence,
"Studying Alone"

Group	Count	Mean	Standard Deviation	Standard Error
K-3	160	.0625	.2428	.0192
4-6	335	.2060	.4050	.0221
Combination	97	.1340	.3424	.0348
TOTAL	592	.1554	.3626	.0149
		Fixed Effects Model	.3578	.0147
		Random Effects Model		.0519

Explanation: Grades 4-6 differ significantly from grades K-3.

TABLE 63

School by Level Scheffé on Condition of Cooperation,
"Studying Together"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.0465	.2131	.0325
Rural, 4-6	113	.1416	.3502	.0329
Rural, Combination	39	.1795	.3888	.0623
Suburban, K-3	69	.0145	.1204	.0145
Suburban, 4-6	94	.1383	.3471	.0358
Suburban, Combination	31	.0000	.0000	.0000
Urban, K-3	48	.0625	.2446	.0353
Urban, 4-6	128	.0469	.2122	.0188
Urban, Combination	27	.0000	.0000	.0000
TOTAL	592	.0811	.2732	.0112
Fixed Effects Model			.2687	.0110
Random Effects Model				.0229

Explanation: No two groups differ significantly at the .05 level.

TABLE 64

School by Level Scheffé on Condition of Cooperation,
"Using Audiovisual Equipment Together"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.1395	.3506	.0535
Rural, 4-6	113	.0177	.1324	.0125
Rural, Combination	39	.0000	.0000	.0000
Suburban, K-3	69	.1014	.3041	.0366
Suburban, 4-6	94	.0106	.1031	.0106
Suburban, Combination	31	.0000	.0000	.0000
Urban, K-3	48	.0000	.0000	.0000
Urban, 4-6	128	.0234	.1519	.0134
Urban, Combination	27	.0370	.1925	.0370
TOTAL	592	.0338	.1808	.0074
Fixed Effects Model			.1772	.0073
Random Effects Model				.0165

Explanation: No two groups differ significantly at the .05 level.

TABLE 65

School by Level Scheffé on Condition of Cooperation,
"Using Audiovisual Materials Together"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.1395	.3506	.0535
Rural, 4-6	113	.0442	.2066	.0194
Rural, Combination	39	.0000	.0000	.0000
Suburban, K-3	69	.1884	.3939	.0474
Suburban, 4-6	94	.0213	.1451	.0150
Suburban, Combination	31	.0968	.3005	.0540
Urban, K-3	48	.0208	.1443	.0208
Urban, 4-6	128	.0781	.2694	.0238
Urban, Combination	27	.0370	.1925	.0370
TOTAL	592	.0693	.2541	.0104
Fixed Effects Model			.2496	.0103
Random Effects Model				.0220

Explanation: Primary grade use in the suburban school differs significantly from intermediate use in the suburban school.

TABLE 66

School by Level Scheffé on Condition of Independence,
"Using the Card Catalog"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.0465	.2131	.0325
Rural, 4-6	113	.1327	.3408	.0321
Rural, Combination	39	.1026	.3074	.0492
Suburban, K-3	69	.0580	.2354	.0283
Suburban, 4-6	94	.1383	.3471	.0358
Suburban, Combination	31	.0000	.0000	.0000
Urban, K-3	48	.0833	.2793	.0403
Urban, 4-6	128	.0313	.1747	.0154
Urban, Combination	27	.1852	.3958	.0762
TOTAL	592	.0861	.2808	.0115
Fixed Effects Model			.2781	.0114
Random Effects Model				.0196

Explanation: No two groups differ significantly at the .05 level.

TABLE 67

School by Level Scheffé on Condition of Independence,
"Returning Materials Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.0930	.2939	.0448
Rural, 4-6	113	.0177	.1324	.0125
Rural, Combination	39	.1538	.3655	.0585
Suburban, K-3	69	.0435	.2054	.0247
Suburban, 4-6	94	.0638	.2458	.0253
Suburban, Combination	31	.4194	.5016	.0901
Urban, K-3	48	.1667	.3766	.0544
Urban, 4-6	128	.0703	.2567	.0227
Urban, Combination	27	.1111	.3203	.0616
TOTAL	592	.0912	.2882	.0118
Fixed Effects Model			.2760	.0113
Random Effects Model				.0357

Explanation: In the suburban school, the primary/intermediate combined levels differ significantly from the other two schools and levels.

TABLE 68

School by Level Scheffé on Condition of Independence,
"Reading Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.0930	.2939	.0448
Rural, 4-6	113	.1239	.3309	.0311
Rural, Combination	39	.2051	.4091	.0655
Suburban, K-3	69	.2464	.4341	.0523
Suburban, 4-6	94	.0957	.2958	.0305
Suburban, Combination	31	.0000	.0000	.0000
Urban, K-3	48	.2500	.4376	.0632
Urban, 4-6	128	.1797	.3854	.0341
Urban, Combination	27	.0741	.2669	.0514
TOTAL	592	.1503	.3577	.0147
		Fixed Effects Model	.3537	.0145
		Random Effects Model		.0263

Explanation: No two groups differ significantly at the .05 level.

TABLE 69

School by Level Scheffé on Condition of Independence,
"Studying Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.0930	.2939	.0448
Rural, 4-6	113	.2920	.4567	.0430
Rural, Combination	39	.2051	.4091	.0655
Suburban, K-3	69	.0145	.1204	.0145
Suburban, 4-6	94	.3085	.4644	.0479
Suburban, Combination	31	.0645	.2497	.0449
Urban, K-3	48	.1042	.3087	.0446
Urban, 4-6	128	.0547	.2283	.0202
Urban, Combination	27	.1111	.3203	.0616
TOTAL	592	.1554	.3626	.0149
Fixed Effects Model			.3466	.0142
Random Effects Model				.0458

Explanation: Both the intermediate levels in the rural and suburban schools differ significantly from the urban level's intermediate grade level.

TABLE 70

School by Level Scheffé on Condition of Independence
 "Using Audiovisual Materials Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.1395	.3506	.0535
Rural, 4-6	113	.1150	.3205	.0301
Rural, Combination	39	.0256	.1601	.0256
Suburban, K-3	69	.1739	.3818	.0460
Suburban, 4-6	94	.0213	.1451	.0150
Suburban, Combination	31	.1290	.3408	.0612
Urban, K-3	48	.0208	.1443	.0208
Urban, 4-6	128	.0859	.3081	.0272
Urban, Combination	27	.0741	.2669	.0514
TOTAL	592	.0878	.2892	.0119
Fixed Effects Model			.2866	.0118
Random Effects Model				.0198

Explanation: No two groups differ significantly at the .05 level.

TABLE 71

School by Level Scheffé on Condition of Independence,
"Using Audiovisual Equipment Alone"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.1628	.3735	.0570
Rural, 4-6	113	.1150	.3205	.0301
Rural, Combination	39	.0256	.1601	.0256
Suburban, K-3	69	.2174	.4155	.0500
Suburban, 4-6	94	.0213	.1451	.0150
Suburban, Combination	31	.1613	.3739	.0672
Urban, K-3	48	.0208	.1443	.0208
Urban, 4-6	128	.0938	.2926	.0259
Urban, Combination	27	.0741	.2669	.0514
TOTAL	592	.0980	.2975	.0122
Fixed Effects Model			.2927	.0120
Random Effects Model				.0250

Explanation: The suburban school's primary level differs significantly from the urban school's primary level.

TABLE 72

School by Level Scheffé on Condition of Success,
 "Satisfactory Participation/Completion of IMC Activities"

Group	Count	Mean	Standard Deviation	Standard Error
Rural, K-3	43	.3256	.4741	.0723
Rural, 4-6	113	.2478	.4337	.0408
Rural, Combination	39	.2308	.4268	.0683
Suburban, K-3	69	.4928	.5036	.0606
Suburban, 4-6	94	.2447	.4322	.0446
Suburban, Combination	31	.6452	.4864	.0874
Urban, K-3	48	.2083	.4104	.0592
Urban, 4-6	128	.2734	.4475	.0396
Urban, Combination	27	.1481	.3620	.0697
TOTAL	592	.2990	.4532	.0188
		Fixed Effects Model	.4459	.0183
		Random Effects Model		.0468

Explanation: The suburban school's primary/intermediate combination differs significantly from all other groups.

Student Interviews

The student interview (Appendix K) focused on all of the conditions of self-concept being studied, namely cooperation, independence, success, feeling valued/accepted, being challenged, positive atmosphere. Personal interviews were conducted with three students from each third, fourth, fifth and sixth grade class. Only the suburban school had sixth graders. Students were selected by the media specialists in consultation with teachers at each school. The media specialist selected students based on criteria which included representation of both sexes, range of normal IQ levels, conversive, and where appropriate, representation of various ethnic/minority groups found in the school. Each interview was audiotaped.

The investigator conducted all student interviews, preceding each with the same introduction (Appendix M). While questions on the interview list were usually used in order, on occasion, when a student began a discussion of a more natural lead into another question, the questions related to those statements were immediately followed up. The investigator also, on occasion, asked a follow-up question such as "Can you explain that?" to elicit fuller responses. Table 73 describes the students interviewed by grade and sex.

All students were generally talkative and cooperative. Even a student who explained that she was shy was very responsive to interview questions.

The review of the student interviews was systematically done

TABLE 73

Students Interviewed
(F = Female) (M = Male)

Grade	Rural	Urban	Suburban	
3	F = 1 M = 2	F = 3 M = 0	F = 2 M = 1	6 F 3 M
4	F = 2 M = 1	F = 2 M = 1	F = 1 M = 2	5 F 4 M
5	F = 2 M = 1	F = 1 M = 2	F = 2 M = 1	5 F 4 M
6	F = NA M = NA	F = NA M = NA	F = 1 F = 2	1 F 2 M

Totals: Female: 17
Male: 13

by the investigator. Using a form developed by the investigator, each audiotape was listened to and the student responses were noted (Appendix N). Based on results found on the forms, comparisons were made and results were prepared for reporting here. Information has been summarized using a narrative and a table format.

Student Interview Results

All of the students interviewed, regardless of grade, indicated that they had used the IMC since going to the school. All knew who the media specialist was, and were able to differentiate the media specialist from the aide, or other adult. All students liked going

to the IMC and were generally visibly excited in answering the question, "How do you feel about going to the IMC?" However, the interviewer forgot to ask the question of two students at the third grade and sixth grade levels in the suburban school.

All students indicated that they checked out books. When responding to the question, "What do you do when you can't find what you are looking for?" all students indicated that they ask the media specialist for help. After her, the aide and classmates/friends were mentioned most. All students were in agreement that the media specialist helped them when they needed it. With the exception of one student that the researcher forgot to ask, all indicated that they felt good about finding materials by themselves.

Most students interviewed used the public library in addition to the school IMC at some time during the year (see Table 74). It was clear, however, that the school IMC was the basic source for information.

Almost all students indicated that they select books when they go to the IMC, even when they engage in other activities as well (see Tables 75 and 76).

All students except three indicated that they found what they needed most of the time by themselves. Of those who did not find most of their materials themselves, one was a boy in the third grade of the suburban school with a reading problem and another was a girl in the fifth grade at the suburban school who indicated that she could not use the card catalog properly. Of interest was the fact

TABLE 74

Do You Ever Use Other Libraries? Which Ones?

Grade	Rural	Urban	Suburban
3	A lot. Oconomowoc when this isn't open	Madison Public Library Branch monthly	Middleton Public Library every month
	Waukesha Public Library every week	No	Middleton Public Library twice in summer
	Waukesha Public Library and Community Center in summer	MPL Branch twice a month	No
4	Waukesha Public Library in summer	MPL once/twice a month	Middleton Public Library in summer
	No	MPL downtown less than once a month	Same
	Community Center in summer	MPL downtown weekly	No
5	Occasionally, Waukesha Public Library	MPL every two weeks	Middleton Public Library when ours doesn't have books I want; for reports; summer
	No	Bookmobile monthly	Middleton Public Library twice a month
	Oconomowoc Public Library in summer	MPL downtown twice a month	Middleton and Madison Public Library once a month
6			Not asked
			Middleton Public Library weekly (volunteer)
			Public Library twice a year

NOTE: Most students interviewed used public libraries (i.e., 24 out of 30 with 1 person not asked question by mistake). Of the 24, 6 indicated use only in summer, 18 out of 30 (slightly over half) use other libraries during the school year.

TABLE 75

What Do You Usually Do in the IMC?
(Students Sometimes Named Several Things)

Grade:	3	4	5	6	Total
Books (Get or read)	R = 3 U = 3 S = $\frac{2}{8}$	R = 2 U = 3 S = $\frac{3}{8}$	R = 3 U = 3 S = $\frac{3}{9}$	R = NA U = NA S = $\frac{3}{3}$	28
Audiovisual Materials (Use)	R = 1 U = 2 S = $\frac{0}{3}$	R = 2 U = 1 S = $\frac{1}{4}$	R = 2 U = 0 S = $\frac{0}{2}$	R = NA U = NA S = $\frac{0}{0}$	9
Games (Use)	R = 0 U = 2 S = $\frac{0}{2}$	R = 0 U = 0 S = $\frac{0}{0}$	R = 0 U = 1 S = $\frac{0}{1}$	R = NA U = NA S = $\frac{0}{0}$	3
Electronic Games (Use)	R = 0 U = 0 S = $\frac{1}{1}$	R = 0 U = 0 S = $\frac{1}{1}$	R = 0 U = 0 S = $\frac{0}{0}$	R = NA U = NA S = $\frac{1}{1}$	3
Other	R = 0 U = 1 S = $\frac{0}{1}$	R = 1 U = 0 S = $\frac{0}{1}$	R = 1 U = 1 S = $\frac{0}{2}$	R = NA U = NA S = $\frac{0}{0}$	4

R = rural

U = urban

S = suburban

NA = not applicable (no 6th graders at rural or urban school)

TABLE 76
Activities in IMC

		Rural			Urban			Suburban				Total
Grade:		3	4	5	3	4	5	3	4	5	6	
Do you:												
Check out books	Yes	3	3	3	3	3	3	3	3	3	3	30
	No	0	0	0	0	0	0	0	0	0	0	0
Use audiovisual materials	Yes	2	3	3	3	2	2	3	2	3	3	26
	No	1	0	0	0	1	1	0	1	0	0	4
Interest tables	Yes	3	2	3	3	3	3	Not Asked				17
	No	0	1	0	0	0	0					1
Display	Yes	3	3	2	0	0	2	1	3	3	3	20
	No	0	0	1	3	3	1	2	0	0	0	10
Read magazines	Yes	2	1	3	1	1	2	3	1	0	2	16
	No	1	2	0	2	2	1	0	2	3	1	14
Newspapers	Yes	0	0	1	None			1	1	0	0	3
	No	3	2	2				2	2	3	3	17
Make anything	Yes	1	2	2	2	2	2	2	1	2	2	18
	No	2	1	1	1	1	0	1	2	1	0	10
Use reference	Yes	3	2	3	2	3	3	3	3	3	3	28
	No	0	0	0	1	0	0	0	0	0	0	1
Play with games	Yes	2	2	3	3	3	3	3	3	2	3	27
	No	1	1	0	0	0	0	0	0	0	0	2
Use equipment	Yes	2	3	3	3	2	3	3	3	3	3	28
	No	1	0	0	0	0	0	0	0	0	0	1

that in the interviews, both indicated enthusiastically how helpful the media specialist from the suburban school IMC was to them. The boy said, for example, "She never says, 'I'm too busy!'"

When students answered the question, "How do you feel when you are not able to find what you need by yourself?", most students said that they felt sad/disappointed, etc. However, 9 out of 30 felt "ok" when this happened. Of the nine in this group, five came from the urban school.

While most students indicated that they helped others in the IMC, third and fourth graders generally helped their classmates. By fifth grade, they indicated that they were helping friends, classmates, and younger students as well.

While no consensus across schools was reached in answering the question, "Is there anything in the IMC that you need permission to do?", there was some direction toward consensus within two of the schools. At the rural school, several students indicated that they needed permission to use the main audiovisual shelf. In the urban school, several students indicated that they needed permission to use the reading castle.

Most students interviewed had been students in the school for at least two years (see Table 77).

With two exceptions which were with the fourth-grade students in the urban school, all other students interviewed had been students in school at least two years. In the urban school, a redistribution of school boundaries and the closing of a nearby elementary school

TABLE 77

How Long Have You Been a Student at This School?

Grade of Student Interviewed	Rural	Suburban	Urban
3	1, 1, 1	Kdg, 1, 2	1, 1, 2
4	2, 1, 2	3, Kdg, 4	2, Kdg, 3
5	1, 3, 3	1, Kdg, 1	1, 1, 3
6	None	None	2, 2, 2

created a shift in students enrolled in the school.

The questions which related to how often students went to the IMC each week, and whether they went alone, with a small group, or with a class were of special interest to this study (see Table 78).

With two exceptions in the third grade in the urban school, all students indicated use of the IMC more than once a week. The lowest average at grades three and four was found in the urban school, where each class had a scheduled period each week.

Variations existed in terms of whether students went to the IMC alone, with a class, or with a small group (see Table 79).

A comparison by grade and type of school showed that in the third grade, students in the rural and suburban schools went to the IMC more often by themselves, while third graders in the urban school went as a class.

TABLE 78

How Many Times a Week Do You Come to the IMC?

Grade	Rural	Suburban	Urban
3	2	4	1
	2-3	2	1
	5	5	4
	Average: 3.16	3.67	2
4	3	10	2
	3-4	3-4	1.5
	5	3	2
	Average: 3.83	5.5	1.38
5	10	5	5
	2	3	20
	15	3	3
	Average: 9	3.67	9.3
6		10	
		10	
		3-4	
	Average:	7.83	

At the fourth-grade level, students from the rural and suburban schools went more often by themselves or with a group; students at the urban school continued to go to the IMC as a class.

At the fifth grade level, students in all types of schools studied indicated that they went to the IMC most often in groups or alone. The urban and suburban schools showed what appeared to be a

TABLE 79

Manner in Which Students Went to IMC: Self/Class/Group

Grade	Rural			Suburban			Urban		
	S / C / G			S / C / G			S / C / G		
3	$\frac{1}{2}$	1	$\frac{1}{2}$	3	1	0	0	1	0
	1	2	-	1	1	0	0	1	0
	4	0	1	3	2	0	2	1	1
Total:	5.5	3	1.5	7	4	0	2	3	1
4	2	1	st	(5)	1	(4)	$\frac{1}{2}$	1	$\frac{1}{2}$
	1-2	st	1-2	1	nu	3	0	1	$\frac{1}{2}$
	1	1	3	(1.5)	1	(1.5)	1	1	0
Total:	4.5	2	4.5	7.5	1	8.5	1.5	3	1
5	(2)	0	(8)	2	st	3	3	1	1
	0	st	2	1	no	2	st (5)	1	(15) u
	12	1	2	0	1	2	2	1	st
Total:	14	1	12	3	1	7	10	3	16
6				9	st	st			
				6	-	4			
				2	no	2			
Total:				17	0	6			

nu = not usually

st = sometimes

no = not often

u = usually

NOTE: Numbers in parentheses are the investigator's estimate of the division by manner of going to the IMC that the students interviewed gave.

preference for going to the IMC with a group, while the rural school total slightly favored independent entry over group entry.

It would appear that, as the importance of peer association rises with grade level, entry as a group compared to alone increases. However, in the suburban school, the only one with a sixth grade class, students once again went to the IMC more independently than with a group.

Most students in the rural and suburban schools indicated that the IMC was used to complete classwork, meaning work using text materials (see Table 80).

TABLE 80

Do You Ever Use the Library to Complete Classwork?

Grade	Rural	Urban	Suburban	Total
3	yes = 1 no = 2	yes = 0 no = 3	yes = 3 no = 0	4 5
4	yes = 3 no = 0	yes = 2 no = 1	yes = 2 no = 1	7 2
5	yes = 3 no = 0	yes = 1 no = 1 NA = 1	yes = 2 no = 1	6 2
6			yes = 1 no = 2	1 2
Total:	yes = 7 no = 2	yes = 3 no = 5 NA = 1	yes = 8 no = 4	18 11

NA = Not asked

A factor in whether classwork could be completed in the IMC related to the philosophy of the classroom teacher, as suggested by some of the students. Also, several students indicated that they used the IMC for this purpose only when they had been sick or absent, and that the use of the IMC for classwork was not on a regular basis.

The question of whether students worked together on class projects showed a trend toward cooperative class projects in the IMC as the grade level increased (see Table 81).

TABLE 81

Do You Ever Work With Other Boys and Girls on
Class Projects in the IMC?

Grade	Rural	Urban	Suburban	Total
3	yes = 1 no = 2	yes = 1 no = 2	yes = 1 no = 2	3 6
4	yes = 2 no = 1	yes = 1 no = 2	yes = 2 no = 1	5 4
5	yes = 3 no = 0	yes = 3 no = 0	yes = 3 no = 0	9 0
6			yes = 2 no = 1	2 1
Total:	yes = 6 no = 3	yes = 5 no = 4	yes = 8 no = 4	19 11

The question, "What do you like best of all about the IMC?" was an open-ended question in which students sometimes named more than one item/activity (see Table 82).

TABLE 82

What Do You Like Best of All About the IMC?

Grade:	3	4	5	6	Total
Books	R = 3 U = 2 S = 1	R = 0 U = 1 S = 2	R = 1 U = 1 S = 2	R = NA U = NA S = 3	4 4 8 <u>16</u>
Audiovisual Materials	R = 1 R = 1 R = 0	R = 3 U = 0 S = 0	R = 1 U = 0 S = 0	R = NA U = NA S = 0	5 1 0 <u>6</u>
Media Specialist/ People	R = 0 U = 0 S = 1	R = 0 U = 1 S = 0	R = 0 U = 2 S = 0	R = NA U = NA S = 1	0 3 2 <u>5</u>
Other	R = 1 U = 1 S = 1	R = 1 U = 1 S = 1	R = 1 U = 0 S = 1	R = NA U = NA S = 0	3 2 3 <u>8</u>

R = rural

U = urban

S = suburban

NA = not applicable (there were no sixth graders at the rural and urban schools)

Suburban students indicated a stronger preference for liking books best than did the students in urban or rural schools; rural students indicated a stronger preference for audiovisual materials than did urban or suburban students. No clear trend by grade was noted in this question, except perhaps at the fourth grade level where one student in each school indicated that "everything" was liked best about the IMC.

Media Specialist Interviews

The media specialist interview (Appendix L) focused on gaining information on the philosophy undergirding the media program, as well as the perception of the media specialist of student use and preferences, role of teachers and principal, parental support. Personal interviews were conducted by the investigator with each media specialist at the end of the school day on the fourth day of the study in each school. Interview questions primarily included those in Appendix L but at the end, also included any questions of clarification about IMC operation needed. Each interview lasted approximately two hours, and each was audiotaped by the investigator.

Since media specialists were aware that the study included an interview, little introduction to the interview was given. Each media specialist was told that questions would include the history and background of the IMC, and questions clarifying the activities of students, the role of teachers and the principal in the IMC program, and some

of their perceptions about the program.

All of the media specialists were at ease and very responsive. Each appeared to be eager to share information about the program, perhaps due, in part, to the limited dialog which had been permitted between the investigator and the media specialist before then.

The discussion of interview question results has been broadly divided according to similarities/differences between media specialist responses.

Areas of Agreement

By far, the areas of agreement between the media specialists were far more substantial than areas in which differences were noted. All media specialists felt that parents valued the IMC, although their reasons cited to support why they felt that way varied, as might be expected. All students had access to public libraries, and both the urban and suburban media specialist specifically indicated that they encouraged student use of public libraries. The public libraries nearest the students in the rural school were most limited in hours in which they were open and in size of the collection.

All media specialists felt that the IMC was very vital to the instructional program in the school. Each gave examples of the IMC's usefulness, especially the suburban media specialist. All media specialists felt that one of the most valuable contributions that the IMC offered to students was through its collection of materials. In addition, the media specialist in the suburban school felt that the

IMC made every child feel that the child's need was important. She stressed the importance of a good self-concept, meeting with success in the IMC, and independence. The urban media specialist stressed the importance of warmth and a feeling of friendship through its programs and its people.

All media specialists felt that the IMC developed patterns useful in developing lifelong learners, although the urban media specialist emphasized the importance of reading in the whole family. All felt that students were capable of doing many things. While the suburban media specialist was most specific here, the rural media specialist indicated that there was "no limit," and the urban media specialist indicated that students were capable of doing "many, many things and doing them independently."

In terms of what they hoped students would be able to achieve in media skills by the time they left the school, all included a mastery of the card catalog, ability to use reference materials, ability to find materials, ability to do research. The suburban and urban media specialists also included a mastery of the Readers Guide and the ability to use audiovisual equipment. The rural and urban media specialists indicated that they hoped that media skills achievement by students would include the ability to use any library. The suburban media specialist also included the ability to use maps, ability to discriminate in the selection of reading material, and the ability to evaluate independently whether they could read materials as media skills she hoped students would achieve.

In terms of what they hoped students would achieve in library usage (frequency) by the time they left the school, all hoped students would use the IMC when they needed or wished to. The urban media specialist expressed a preference that students not be limited to the use of the IMC once a week. The urban school was the only one in which all students had a weekly IMC period, although other opportunities for use were available.

In terms of what the media specialists hoped students would develop in attitudes by the time they left the school, all of them expressed the hope of development of positive attitudes about libraries in general. The rural and suburban media specialists offered the most similar responses here, stressing attitudes about public materials, and attitudes about sharing, caring, and assuming responsibility for returning materials when they were due. The urban media specialist's response focused on attitudes of independence, helpfulness and friendliness of the staff, and feeling good in an IMC.

All the media specialists indicated that students were allowed to use almost anything. The rural media specialist indicated that sometimes teachers asked that students not use some audiovisual materials; the media specialist in the urban school indicated that youngest students could not use the equipment until they were taught.

All indicated that opportunities for independent use were available whenever the IMC was open, while indicating that teacher permission played a strong role in actual IMC utilization. All personally indicated that they and the teachers encouraged independent use of the

IMC. The media specialists in rural and urban schools also included the principal as someone who encouraged independent use. The media specialist in the rural school stressed making the IMC attractive and inviting as a way in which she encouraged independent use. The media specialist in the urban school stressed special events, displays and a weekly bulletin to encourage independent use.

All media specialists felt that teachers were involved in the IMC program. The media specialist in the rural setting indicated that all were involved informally, the media specialist in the suburban setting said, "If they are not, it's my fault," and the media specialist in the urban setting said that all teachers were involved in the media program in spirit.

All media specialists indicated that the role the average classroom teacher played in the IMC program was important. The media specialist in the rural school stressed the importance of suggestions from teachers, involvement in book selection, and work with students in the IMC. The media specialist in the urban school stressed informing the media specialist of special needs, working with her in sending single groups, and recommending or working cooperatively on activities. The media specialist in the suburban school stressed the importance of teachers defining expectations to students about doing research; requiring research; encouraging and requiring leisure reading; reinforcing and carrying through on IMC activities.

A similar question to the above related the media specialist's perception of the teacher's role in promoting use. The media

specialists in rural and urban schools were in agreement with the media specialist in the suburban school about the importance of making assignments which encouraged the utilization of materials. In addition, the media specialist in the rural school stressed the importance of the teacher being a role model by being there and using the IMC, and encouraging reading. The media specialist in the suburban school stressed the importance of knowing the library and its resources well; giving students freedom in assignments based on material availability; encouraging use of more than one source; encouraging personal inquiry; encouraging independence. The media specialist in the urban school stressed the importance of teachers encouraging students to use the whole IMC (not just books) and to use the IMC often.

There was agreement that the principal's role in the IMC program was back-up and support, including financial support. The media specialist in the suburban school elaborated by indicating that the media specialist and the principal should work out policies together, and that the principal should help define and evaluate the IMC program. The media specialist in the urban school indicated that the principal's role was to encourage use, publicize, and participate in the program.

All the media specialists planned special activities for students. The media specialist in the rural school had the most spontaneous activities. Aside from planned read-ins for students with students, staff and parents participating, there were teddy bear

days, doll days, and books which they read which gave ideas for activities. According to the media specialist, natural, spontaneous projects allowed students to participate without an undue amount of work. The media specialist in the suburban school's special activities included a primary and an intermediate stamp club, Spanish Club, writing club, and Frog and Toad Fan Club (for youngest children). Student activities also included an annual "thank-you" film festival for kids, and an annual Peter Rabbit Tea Party for first graders.

The media specialist in the urban school had the most formalized special activities program for students. Plans were made according to observances and holidays throughout the year. Examples included United Nations Week, where foods from many countries were available for tasting, and Arbor Week activities, where the media specialist coordinated the planting of a tree, provided maple-flavored and shaped cookies, Arbor Week interest table, and seed packets from trees among other activities. The description of these many special activities showed that lots of effort, planning and coordination took place on the part of the media specialist.

All media specialists indicated some type of activity for teachers during the year. All media specialists also had activities for parents during the year. The media specialist in the rural school indicated that these included parents coming to check out books for themselves and their children; IMC activities during the school's open house; and a school bookfair which she originated but parents continued. The media specialist in the urban school mentioned

programs during the year for preschoolers with their parents; parent read-ins for students; coffee and visits from parents during Book Week. The media specialist in the suburban school indicated that she wrote for parents bulletins from the school, and suggested books as gifts.

All media specialists indicated some encouragement of students to work together, whether it included students working with classmates or older students working with younger ones. While most cooperative activities were described as being natural, spontaneous ones, there were examples of structured cooperative activities. These generally included IMC skills activities for pairs or small groups for all grade levels. Within the larger school setting, structured activities included teachers teaming an older student with a younger one for drill and practice sessions.

A look at what students do by grade levels should further illustrate similarities among media specialists. In reference to grades kindergarten through second, all indicated that most students were dependent upon the media specialist to find something special, although each stressed that students in this group were learning to use the card catalog, especially in the second grade. All agreed that the majority of students in grades kindergarten through second was generally successful in finding what they were looking for, although the percent of estimated success varied. Media specialists in the rural and urban schools suggested success rates at 60 and 60-65 percent, respectively. The media specialist in the suburban school estimated that 95 percent were successful with help.

In grades third and fourth, all indicated that students were more independent in using the IMC. The percentage of students that they estimated were able to find what they were looking for was 75 percent (media specialist in rural school); 80 percent (media specialist in suburban school); and 60-65 percent (media specialist in urban school). It should be noted here that the urban school included a number of students who were transferred to that school because of the closing of an elementary school in the area. Further, the media specialists at the rural and urban schools felt that 60 percent of the third and fourth graders used the card catalog successfully, compared to an estimate of 80 percent by the media specialist in the suburban school.

In grades fifth and sixth, all felt that most students went to the card catalog when they wanted to find specific materials. The media specialists in the rural, suburban, and urban schools estimated that students were successful in finding what they were looking for 80 percent, 90 percent, and 70 percent of the time, respectively. Further, they indicated that students were successful in using the card catalog for 80-85 percent, 90 percent, and 75-80 percent, respectively.

All felt that students were very comfortable in asking them questions. All encouraged active student participation such as discussions in IMC skills activities.

All felt that interest centers were important. The media specialist in the rural school indicated that interest centers called

attention to certain types of material; the media specialist in the suburban school indicated that they encouraged individual interest and creativity. The media specialist in the urban school indicated that interest areas encouraged students to go to the IMC; to teach skills; and to receive a cultural background.

Finally, all indicated that the media aide enabled them to spend more time with students and to be more creative. Each indicated fairly traditional roles for the aide, such as shelving, circulation responsibilities, but the media specialist in the urban setting indicated that the aide had a more equal role than that of the others. For example, the aide worked with adult volunteers and used professional selection tools to suggest titles to the media specialist based on her experiences in working with children.

To summarize, the three media specialists in the study had many areas of agreement. These included the following:

- Parents valued the IMC
- All students had access to public libraries
- The IMC was very vital to the instructional program
- The IMC offered many valuable contributions to students
- The IMC developed patterns useful in developing lifelong learners
- Students were capable of doing many things
- Students could be expected to achieve much in skills, in attitudes, and in IMC usage by the time they left the school
- Students were permitted and encouraged to use almost anything in the IMC
- There were opportunities and encouragement for independent use of the IMC
- Teachers were involved in the IMC program
- The role the teacher played in the IMC program was important
- The principal played an important role in IMC development

Special activities were planned for teachers
 Special activities were planned for students
 Special activities were planned for parents
 Students receive some encouragement to work together
 Students showed similar patterns by grade level in
 their competence in finding materials successfully alone
 Students felt comfortable in asking the media specialists questions
 Interest centers were important
 The media aide was important to the program

Areas of Differences

While there were no sharp differences observed between the three media specialists, the discussion which follows noted some differences in perspective.

All media specialists felt that the role of the teacher in utilizing and supporting the IMC was important. However, the media specialist in the urban school indicated that she preferred that teachers not be present when their class was in the IMC for their scheduled period.

All media specialists stressed the importance of developing independent use of the IMC by students. However, the media specialist in the urban school strongly supported the worth of scheduled weekly periods for each class in addition to independent IMC utilization.

Media specialists' perceptions of what students in their respective school preferred to use varied. The media specialist in the rural school felt that students preferred to use filmstrips and cassettes and filmloops. The media specialist in the urban and suburban schools felt students preferred books. In addition, the media

specialist in the suburban school felt that students preferred electronic games.

In terms of the kinds of activities that media specialists felt students should be involved in, there were some differences. The media specialist in the rural school stressed story sharing between intermediate and primary grade children, as well as projects, reference work and utilizing audiovisual materials. The media specialist in the urban school stressed mental, thinking exercises, where students read instructions and directions. She included crafts, games, puzzles, audiotaping, choral reading, reading, and dramatization as examples. The media specialist in the suburban school stressed individual pursuits but indicated that she provided times for group activities as well. She also mentioned relaxing, talking quietly, sharing, and reading as activities that students should be involved in.

The estimate of the percent of students who took advantage each week of the opportunity to use the IMC at times other than scheduled ones varied. The media specialist in the rural school felt that between 50-100 percent used the IMC; the media specialist in the urban school estimated 60 percent; and the media specialist in the suburban school estimated 20-30 percent, with upper grades using the IMC independently often, while primary grade students did so less often.

While all of the media specialists had some teaching experience, the media specialist in the rural school had the most years of teaching experience and had taught at kindergarten through eighth grade

levels. The media specialist in the suburban school had been a children's public librarian for three years and had taught fourth, fifth, and sixth graders for one semester. The urban media specialist indicated that she had done substitute teaching.

The media specialists in the rural and urban communities had the greatest years of experiences in the school media field, 16 and 17 years, respectively, compared to 10 years' experience for the media specialist in the suburban school.

While each school IMC employed one full-time equivalent aide, the schools differed in terms of actual staffing support. The rural school IMC utilized no adult volunteers. However, they utilized student aides from the middle school. In addition, there were two half-time aides. The urban school IMC relied heavily on adult volunteers, averaging one to two a day. All were former teachers, many with master's degrees. Usually, the media aide worked with them. The suburban school IMC utilized four adult volunteers, one of whom was trained as a librarian. According to the media specialist, these volunteers preferred creative work.

Differences in student assistants also varied. The rural school had an audiovisual and a library club, using students from the fifth grade, and the fourth and fifth grades, respectively. Everyone who wanted to be a library aide was accepted. The audiovisual club was a smaller and more select group. Both clubs met together weekly as one group with an elected president and they utilized parliamentary procedures. In addition, the rural school

IMC utilized volunteer student assistants from the middle school.

The suburban school IMC had no assistants club. The media specialist planned to reactivate one in the next school year. The urban school IMC had no formal club. The media specialist preferred to ask students who were in the IMC to help her briefly as she needed help.

When asked to estimate the percentage of students who used the IMC for recreational purposes, the rural, urban and suburban school estimates were 25 percent, 60 percent, and 33 percent, respectively. When asked to estimate the percentage of students who used the IMC for personal inquiry, the estimates were 25 percent, 15 percent, and 33 percent, respectively. When asked to estimate the percent of students who used the IMC for class assignments using the IMC materials, the estimate for the rural school was 50 percent and 25 percent for the urban school. The media specialist in the suburban school indicated that use varied by grade up to 75 percent for sixth graders and down to 10 percent for the youngest students.

Differences in the emphasis on interest tables varied widely. The suburban school had only one table which was classified as an interest table, although there were some materials on shelves. The rural school IMC had about seven to eight interest tables and the urban school IMC had at least 20 interest areas. In the case of the rural and the urban schools, some interest centers/areas would change frequently. Others were permanent.

The answer to the question, "What would you see as the ideal

IMC program at (name of school) school?" elicited responses which concentrated on each school's individual problems and strengths.

The media specialist in the rural school considered the current IMC program "a dream come true," citing the plans which had been underway for the IMC for so many years. She did express a desire for more time for the students to use the IMC and interact with her; more use of the card catalog; and more programming in general and programs featuring authors; more parents utilizing the IMC.

The media specialist in the urban school wanted the return of the half-time aide's position which was lost; an extended reference area; a creative writing area; student display area, including student writing.

The media specialist in the suburban school wanted a better place for story hours; more books at the picture book and sixth grade range; more inservice with teachers in determining how students would use the IMC; more support staff; more audiovisual materials; photography; more creativeness; more cushions; a stuffed frog and toad; another old-fashioned desk.

To summarize, the three media specialists in the study had few substantial areas of differences. Where differences existed, these included the following:

The media specialist in the urban school preferred
that teachers not be present during the scheduled weekly period
Perceptions of what materials students preferred
to use differed somewhat
Examples of kinds of activities in which media
specialists felt students should be involved
differed

Estimates of the percentage of students who used
 the IMC independently varied
 Years of classroom teaching experience varied
 Staffing support patterns varied somewhat, i.e.,
 adult volunteers and student assistants
 Differences in perception of percentage of stu-
 dents who used the IMC for recreational, per-
 sonal inquiry, and class assignments
 Differences in emphasis on interest tables
 The ideal IMC program envisioned by each media
 specialist varied

Diary

A written diary was kept by the investigator in each of the
 schools studied. The diary focused on activities going on in the
 entire IMC over a given time period. The investigator noted
 especially spontaneous comments made by students, the media spe-
 cialist, the aide and others. Also noted were interactions between
 the students with each other, the students with the media specialist,
 the students with the aide. The sex of the person(s) engaging in
 activities was noted to see whether there might be a trend toward
 certain activities and the sex of the student.

The diary was not written when the investigator interviewed
 individual students. Immediately upon completion of each interview,
 the investigator again began the diary. In all, at least 50 hand-
 written pages of notes were taken at each school studied.

For analysis purposes, each diary was reviewed several times.
 Findings common to all schools were noted, as well as unique aspects
 of each IMC. Patterns of use by each grade level were noted for

each school day and were summarized. Finally, diary contents were reviewed and were arranged according to examples in each school which could be said to be indicators of the conditions being studied, namely: cooperation, independence, success, challenge, feeling of value/acceptance; positive atmosphere. The results of each of the aspects of the evaluation will be reported.

Commonalities of All School IMCs

The diary review showed that all school IMCs exhibited many smiling, laughing children who appeared to enjoy themselves and their experiences in the IMC. A great number of activities or encounters were of very short duration, whether students were sharing a favorite book, browsing at interest tables, or looking at a magazine. Students showed a great deal of freedom, were able to wander about the IMC, whether they were primary or intermediate grade students. In addition to independent opportunities to wander about the IMC, every IMC employed a self check-out system for materials, regardless of grade level. Repeated individual use was observed each day. Students appeared to have favorite activities and appeared to focus on them. For example, the paperback book exchange was clearly THE activity of the week in the urban school. In the suburban school, students of all ages enjoyed the electronic games.

Independent use of audiovisual materials was observed at all schools, but especially at the rural and suburban ones. Primary grade students busied themselves with audiovisual materials and equipment

in delightful ways without any visible concern from the media specialist.

Most activity in the IMC was purposeful. It appeared that students were less likely to engage in nonpurposeful activities when entry was individual or in small groups. The only exception which was noted was when a group of students had been given the IMC as a free period without a real purpose.

No activity was noted which exclusively engaged one sex rather than another. Boys as well as girls utilized audiovisual equipment and materials; primary grade girls and boys carried around stuffed animals, stroked them, sat in rockers with them.

No stigma about easy versus higher grade level material was observed. All primary grade students used regular nonfiction as well as easy reading materials. In addition, older students readily read books in the easy section of the IMC. Several also were often seen utilizing tables in easy reading areas for studying and other work, even when other tables were available.

Without doubt, students of all ages gravitated to the media specialist in each school. The media specialist almost always had a child or children nearby. All of the media specialists appeared to work well with the children. All of them were viewed teaching media skills on an individual basis. Many students in the IMC therefore received personal attention throughout the week.

Although the IMCs had a variety of offerings, all of them were still consistent in that books were heavily utilized. For the most

part, only books were checked out. Very few audiovisual items were checked out, and although magazines could be checked out, except in the suburban school, there was little evidence that they were.

Unique Aspects of Each IMC

Rural IMC. There appeared to be a good balance of individual and class use of the IMC. Although it was expected that there would be a great deal of IMC use before and after school, there was little use of the IMC before and after school observed. Students used the IMC as a hallway throughout the school day, getting from one side of the building to the other. However, this appeared to be a useful exercise, as they were often viewed examining materials as they walked through.

Lots of tactile stimulation was available and utilized. Boys, even in the intermediate grades, appeared to enjoy the stuffed animals and could be seen stroking the animals.

Teachers were observed working with students, even when students had gone to the IMC individually or in small groups. While some encounters were brief, it was obvious that teachers reinforced the students' work in the IMC.

Two features of the school serve to highlight the IMC experience. One was the silent reading program at the school. The existence of the RIBET program encouraged reading and the utilization of the IMC. Another feature was that of making original books by intermediate grade students. This aspect of the school program was run by

adult volunteers. The books were placed in the library for display and circulation to students. The first year of the activity was 1980-1981, which was the year of the study. Thus, there was excitement about the books. Students went to the IMC to look at and check out the books. Some even went to see if their own book had been checked out.

Interest was shown especially during the week in a collected book of photographs of all students in the school, and the teddy bear display to which first and second graders contributed.

Although most classes had scheduled IMC periods, they still appeared to make much use of the IMC on a regular basis at other times.

The media specialist used a large group instruction area located downstairs for media skills and story hours. She gave initial skills instruction, for example, to all third graders at once. Then exercises for small groups or individuals were performed in the IMC during scheduled or arranged class periods. The primary grade students had story hours in the pit as well. This investigator observed the media specialist give a story hour to all first grade students at once (about four classes).

The IMC in the rural school was unique in that it was the only one without adult volunteers. Instead, middle school aides worked in the IMC, and an audiovisual and library club offered assistance.

Classes in the intermediate grades located nearest the IMC often appeared to use the IMC as a natural extension of the classroom

-- doing school classwork, rehearsing for a play, etc.

During the week of the study, primary grade students were giving a fine arts program, so that they did not use the IMC as much as usual, according to the media specialist.

Urban IMC. The IMC located at the urban school contained an abundance of interest tables or areas throughout the IMC. Nearly every table was also an interest table. It was also the only IMC with an annual theme. The introduction on a regular basis of tangible rewards/treats such as candy and other food was unique to this IMC program.

Game playing of games such as chess, checkers, tic-tac-toe, author game, and cool chicken (skills game) were popular, especially chess.

More rigidity in scheduling existed at the urban school compared to the others studied. Every class had a scheduled period each week. A number of students appeared to go to the IMC only when a class period was scheduled. The IMC did not appear to be used as much for classwork, either for homework or for reports and the like. Use of the card catalog at the urban school was less than that observed at the other schools. In addition, the use of audiovisual materials was less than that seen at the other schools.

The principal was an active participant in the IMC program. He was seen going to the IMC a few times every day, chatting with students and the media specialist. A plant belonging to him was displayed and referred to during story times with young children.

Teachers did not generally remain with classes during the IMC period. However, adult volunteers were present at most times in addition to the media specialist and the aide. There were several adults on hand to help students.

The media specialist often helped students in the IMC. She often asked them if they needed assistance.

There was a clear emphasis in the urban school on "choosing books first," and then engaging in other IMC activities.

Observances during the year were especially emphasized at the urban school. During the week of the study, a paperback book exchange was held, and observances of Arbor Week and May Day were held. The paperback book exchange was the first one held in two years. A great deal of excitement was generated, resulting in the book exchange being the most popular activity of the week. In addition, May 1st occurred at the end of the week, and a Maypole was erected and a May Dance was held during each scheduled period near the end of the week. The festivities appeared to be enjoyed by the children. The Arbor Week Celebration included students receiving, depending on grade, apple slices, maple-flavored and shaped cookies, tree leaves, seeds, etc.

The urban school IMC was also the only one with a reading castle, where children could climb a ladder and read. Other unique physical characteristics were described earlier in Chapter 4.

Suburban IMC. The suburban IMC utilized a modified flexible scheduling system, whereby primary grade students would go to the IMC

for IMC periods. The higher the grade, the less the likelihood that students would have weekly scheduled IMC periods. Instead, at the intermediate level, students went to the IMC as a class when the teacher and/or media specialist felt it was needed. Otherwise, regular use on an individual and group basis was the norm.

The suburban IMC was the only one with electronic games. Games in the areas of reading, math, and spelling were enjoyed by all ages whenever the IMC was open. The suburban IMC was the only one with a conference room area. Four conference rooms adjoined the IMC on one end, and a large group instruction area used by teachers on the other end.

There was much use of the IMC before and after school, mainly for the check-out and return of materials.

Interaction by the media specialist with students was heavy at all times. The media specialist knew the names of all the children. She placed a heavy emphasis on the areas of reading guidance and fiction. During the week of the study, there was a heavy use of reference materials.

Clubs during the lunch hour for interested students were coordinated by the media specialist. These included a Spanish Club, Stamp Clubs, Writing Club.

A unique learning-by-doing skills experience was provided to students. The emphasis was clearly on this technique. For example, when encyclopedias were introduced to second graders, they spent their period pouring through about four stacks of different encyclopedias

discovering which ones were at a reading level that they could read.

Success experiences were abundant here, judging from the numerous vocalized expressions of success made by the users.

During the week of the study, President Reagon was shot; a student who was a kindergartner drowned with her mother and sibling in a ferryboat/car accident; a seventh grade brother of a student at the school was killed on his bicycle.

Patterns of Use by Grade Level in Each School

Table 83 shows the grade levels which were thought to have used the IMC each day according to diary information. No attempt was made to indicate the number of students in a grade level who used the IMC on a daily basis.

The table shows that the urban and suburban schools had users from nearly all grade levels. In the rural school, fewer primary grade students used the IMC early in the week because of the practicing schedule for their fine arts program.

Diary Review by Condition of Self-Concept

This brief discussion will be limited to examples of indicators found in the three schools which relate to each of the six conditions studied. Where appropriate, examples include verbatim remarks of IMC staff and users. Examples were found which were indicators of the presence of each condition being studied.

TABLE 83

Use of IMCs on a Daily Basis

1) RURAL SCHOOL

Grade:	Day:	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Kindergarten					X	
1			X		X	X
2				X	X	X
3		X	X	X	X	X
4		X	X	X	X	X
5		X	X	X	X	X

2) URBAN SCHOOL

Grade:	Day:	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Kindergarten			X	X		
1		X	X	X	X	X
2			X	X		X
3		X	X	X	X	X
4		X	X	X	X	X
5		X	X	X	X	X

3) SUBURBAN SCHOOL

Grade:	Day:	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Kindergarten		X			X	X
1		X	X	X	X	X
2		X	X	X	X	X
3		X	X	X	X	X
4		X	X	X	X	X
5		X	X	X	X	X
6		X	X	X	X	X
Special					X	

Cooperation.

In the IMC in the rural school, the following examples of fostering cooperation are given:

- a) A first grade girl asked a fourth grade boy, "How do you work those things" (filmstrip projectors). The fourth grade boy had a bit of trouble, but he managed to get it to work, and then showed the first grade girl how.
- b) A group of third graders was divided into pairs and cooperatively practiced finding types of cards in the card catalog. They also quizzed each other.
- c) A fourth grade girl spontaneously helped a first grader in nonfiction. First, the older student asked the younger to read the book under consideration aloud. "You probably need some help on some of the harder words. Does your mom help you?" Affirmative nod. "Then I think you can get it." "Thank you." "You are welcome."

In the urban school IMC, the following examples of fostering cooperation are given:

- a) Fourth graders presented a puppet show to kindergartners.
- b) Five second graders cooperatively used the card catalog, located books on the shelf and began to study with the books that they had located.

In the suburban school IMC, the following examples of fostering cooperation are given:

- a) A kindergarten class had two severely handicapped students. During the IMC visit, the students began sharing books in small groups. One of the students was so severely handicapped that she could turn a page only with great difficulty. The others permitted her to do so, and one read the story aloud.
- b) First graders read and shared during their IMC period, especially on a couch in the periodicals area.
- c) Four third graders worked together using electronic games even though they each had one.

Independence.

In the IMC in the rural school, the following examples of independence are given:

- a) Individual use of audiovisual materials and equipment.
- b) Purposeful coming and going. At times, someone was heard to whisper, "It's time to go," particularly among youngest students.

In the IMC in the urban school, the following examples of independence are given:

- a) Spontaneous entry before, during and after school for game playing, paperback book exchange, etc.
- b) Independent check-out and return of materials.

In the IMC in the suburban school, the following examples of independence are given:

- a) Students in third grade independently used a system of suggested readings where each student had her/his own envelope, then made choices about selections, and proceeded with selections.
- b) Media specialist: "Now, can you find it by yourself? I'll be here to help if you need me."
- c) Media specialist taught third graders a simple readability formula to help them choose recreational reading material. "If it is very hard, don't get it. It'll spoil your reading."

Success.

In the IMC in the rural school, the following examples of success are cited:

- a) Second or third grade boy overheard: "I really know how to use the library!"
- b) Third grade boy smiled and said to the investigator: "Finally got the book I want!"
- c) Fifth grade girl overheard: "I found the book I looked for that time."

In the IMC in the urban school, the following examples of success are cited:

- a) A kindergarten boy found a dinosaur book and was heard to chant over and over as he smiled, "Dinosaur, dinosaur!"

- b) Fifth grade boy remarked after playing chess:
"I like chess! I love chess!"
- c) First grade girl with a Greek alphabet book:
"This is neat! From my own country! My
very own book!"

In the IMC in the suburban school, the following examples of success are cited:

- a) First grade girl used filmloop projector after an intermediate boy taught her. Then she taught two more first graders.
- b) Second grade boy during reference lesson with encyclopedias: "I found it, Mrs. . . . I found turtles under T!"
- c) Second graders successfully used sound film-strip projector and selected what they saw, "Oh, this is a good one!"
- d) Second grade boy was praised by the media specialist for using the card catalog to find what he was looking for.

Being Challenged.

In the IMC in the rural school, the following examples of being challenged are cited:

- a) Second grade boy checked out a calculator.
- b) First graders observed doing reports on the presidents using nonfiction books.
- c) Media specialist introduced first graders to original books by older students. A first grader shouts, "Oh, I know her!"

In the IMC in the urban school, the following examples of being challenged are cited:

- a) First graders chose books and in oral discussion indicated whether they were fiction or nonfiction.
- b) Sheep corder located near a lifesize sheep encouraged students to ask about it and try it.
- c) "Name the sheep contest" encouraged younger students to practice spelling.
- d) First grader checked out Born Free.

In the IMC in the suburban school, the following examples of being challenged are cited:

- a) First graders, through cooperative planning between media specialist and teachers, studied authors and illustrators of picture books. They used Something About the Author.
- b) Magnetic board for spelling for youngest students.
- c) Fifth grade class got a lesson on the use of the Abridged Readers Guide.
- d) Media specialist met with kindergarten group. She showed pictures of paintings from the National Gallery of Art, then permitted students to independently review the art books by themselves.

Feeling Valued.

In the IMC in the rural school, the following examples of

feeling valued are cited:

- a) Fourth grade boy doing math explained to two third graders who were doing a card catalog lesson, "You can do anything you want in the library."
- b) Third grade girl who found her original book on display, "This is my own book!"
- c) Fifth grade teacher checked out easy books for her own child. A student says, "Do you have mine?"
- d) Four second graders go to media specialist to tell about family treasures. A boy exclaims: "My great great grandmother made a doll and I still have it!"

In the IMC in the urban school, the following examples of feeling valued are cited:

- a) Two fifth grade girls bring media specialist flowers in two separate instances. She kisses each of them.
- b) Media specialist knew most students by name.
- c) Media specialist gave students constant attention. "Anyone need help? Anybody want a good book?"

In the IMC in the suburban school, the following examples of feeling valued are cited:

- a) Media specialist to a fourth grade group: "I don't think we need to do anything more with the card catalog, do we?"
- b) Media specialist to a third grade class: "You are the best bunch of library users I've had."

- c) Media specialist to special education primary group: "Jason, thanks for raising your hand." Then, after a story that they really liked, she read it again.
- d) Third grade boy brought a book to recommend to the media specialist for purchase.
- e) Media specialist knew students by name.

Positive Atmosphere.

In the IMC in the rural school, the following examples of a positive atmosphere are cited:

- a) A slide/tape presentation about the IMC design signed by students ended with the words: "Please use it often. You are welcome all the time."
- b) First grader sharing handwriting with an intermediate grade student overheard saying, "Do we have to leave so soon?"
- c) Third grade girl brought a book that belonged to her great grandmother and happily shared it with the media aide. The aide admired the book and exclaimed: "That was even before I was born!"
- d) Fifth grade boy came and proudly shared a costume he was wearing with the aide.

In the IMC in the urban school, the following examples of a positive atmosphere are cited:

- a) As two first graders were given maple-flavored cookies, they exclaimed: "Oh, smell it!"

- b) When the Maypole was put up, many children were heard to exclaim, "Look at that!"
- c) On one day of the study, the media specialist wore a ceramic heart pen that a student made her which said "Love."

In the IMC in the suburban school, the following examples of a positive atmosphere are cited:

- a) Teachers were viewed using the IMC -- reading the newspaper, coming in and out to help students. This sometimes occurred even when students were not from the teacher's class.
- b) First grade boy was seen getting the stuffed Snoopy animal, hugging him, then walking around carrying it.
- c) At any one time, students of all ages could be seen using the IMC -- reading, using the card catalog, selecting materials, using electronic games, on the floor, in rockers, etc.

CHAPTER V

SUMMARY AND CONCLUSIONS

A brief overview of the study, together with strengths and limitations, is presented in this chapter. Conclusions, based on study results, are discussed. Recommendations for research and educational practice are presented.

Summary

The purpose of the study was to determine whether an elementary school instructional media center (IMC) which had a full-time media specialist, a full-time aide, a variety of current printed and audio-visual materials, and a program of activities and services, had components which could be identified as those which could be said to promote or enhance positive self-concepts in elementary school students. The conditions selected for study were: cooperation, independence, success, positive atmosphere, challenge, and feeling of value or acceptance. Following a pilot, these conditions were investigated during one-week study periods in each of three Wisconsin elementary school IMCs representing rural, urban, and suburban communities.

Researchers including La Benne and Greene (1969) and Purkey (1970) have shown that a strong reciprocal relationship exists between positive self-concepts and scholastic success.

Research (Gordon, 1972; Purkey, 1970; Thomas, 1973) has also shown that the early years of life, including the elementary school years, are critical in forming a child's opinion of herself/himself.

An examination of the literature of the aims of instructional media centers (IMCs) shows that IMCs seek to provide an atmosphere conducive to learning, materials to meet curricular needs, and seek to stimulate interest and creativity. Further, IMCs seek to encourage self-fulfillment and inquiry among its users. In its broadest sense, the study examined the question of whether IMCs as described in the first paragraph of the summary could be said to contribute to positive self-concepts in children.

The study utilized the following research methods: observation, interview, and diary. In addition to the investigator who conducted student interviews with students in grades 3 and up and interviews with the media specialists, the study utilized a panel of experts and two observers, one of whom observed for the entire study period of one week in each school. The second observer was utilized for one full day or 20 percent of the time to insure inter-observer reliability. Inter-observer reliability for all schools involved in the study was high, and was reported in Chapter IV.

Questions were asked for each research method utilized. Each of the questions will be repeated here according to the method utilized.

Observation Model Instrument Questions

- 1) Were there any differences depending on the day of the week in which certain activities take place?
- 2) Were there activities which occur at one type of school more or less frequently than at others?
- 3) Were there activities which occurred more or less frequently at certain grade levels than others? What were they?
- 4) Did the expected frequencies of the occurrence of the activities agree with the outcomes of the study?
- 5) Did the IMC programs appear to contribute equally to conditions of cooperation, independence, and success as indicated by the observation model? If not, which condition did the IMC appear to contribute most substantially to?
- 6) Which activities which were expected to occur did not? What caused the discrepancy?
- 7) How might the observation instrument be further refined?
- 8) Were there indicators of conditions that need to be redefined?

Physical Description of the IMC

A portion of the study involved a description of the physical setting of the IMC. The description was designed to investigate conditions being studied: positive atmosphere, feeling of value/acceptance, being challenged.

Questions generated were as follows:

1) Did the IMC contain or have access to materials which would be appropriate for a variety of learning styles and levels?

2) Was there easy access within the IMC? Were books on shelves of a suitable height for reaching? Was the card catalog conveniently located? Was the card catalog low enough so that primary grade students could use it if they so chose? Were audiovisual materials located in a manner and place which would encourage student use?

3) Was there evidence of student contributions to the IMC such as displays, student work, and the like?

4) Was there evidence of a focus on concrete IMC experiences, such as those which focused on the senses — feel, smell, sight, hearing? (E.g., colors, decorations, comfortable furniture, carpeting, plants)

Student Interviews

The student interviews were designed to further investigate what had been observed, and to focus specifically on the following conditions being studied: cooperation, challenge, independence, success, feeling of value/acceptance, positive atmosphere.

Questions generated were:

- 1) How did students feel about using the IMC?
- 2) Were there any major differences in responses by grade level? By sex?
- 3) What did students like best about the IMC?
- 4) Did students interviewed in the upper grades go to the IMC more often than lower grade students who were interviewed?

5) Was there a difference by grade level in the manner in which students used the IMCs? E.g., Did upper grade students go more independently while third graders went as a class?

6) Were there differences in preferences of activities within schools by grade?

7) Were there restrictions imposed by grade level?

8) Did students in lower grades report fewer successes in finding what they looked for than intermediate grade students?

9) Did students perceive differences in roles between the media specialist and the aide?

10) What did students of all levels agree on?

11) Where were there differences among students?

Media Specialist Interviews

Media specialist interviews were designed to focus on all conditions of self-concept being studied, namely cooperation, independence, success, challenge, feeling of value/acceptance, and positive atmosphere. The broad questions generated were:

1) How similar was the philosophy of three media specialists?

What was that philosophy? How did the physical setting reflect it?

2) What was the perception of the media specialists concerning abilities of students? Focus of IMC? Developing independence in children? Success?

3) Were IMC activities designed to promote cooperation and/or independence?

Diary

Diary information was used to collect data relating to all conditions of self-concept being studied, namely cooperation, independence, success, challenge, feeling of value/acceptance, and positive atmosphere. The questions generated were:

- 1) Was there a difference by primary or intermediate levels as to independence? Group utilization?
- 2) What unique features existed by type of IMC? What might these differences be attributable to?
- 3) What commonalities were there among IMCs?
- 4) Were there examples of indicators for all conditions studied?
- 5) Were there observed differences in use by sex? Grade level?
- 6) What type of interaction was there between the student and the media specialist? Amongst the students themselves?
- 7) How did others -- aide, adult volunteers, student assistants -- support the IMC program?
- 8) Were there differences which occurred depending on the day of the week?
- 9) What patterns were evident?

Study Analysis

Each research method, i.e., observation, interviews, diary employed the following methods of data analysis. The observation sheet data which listed 39 activities were analyzed by estimated and actual frequency of observed activities. Then, 18 of the activities which occurred most frequently were submitted to analysis of variance.

Those showing statistical significance at the .05 level were further analyzed using the Scheffé technique.

A full description of the IMC's physical setting was given as part of the analysis which focused on the conditions positive atmosphere, feeling of value/acceptance, and being challenged.

Student interviews were separately analyzed. Areas of commonalities and dissimilarities were noted and described as they related to all six conditions of positive self-concept being studied. Media specialist interviews were analyzed in a similar manner.

Diary information of occurrences in the entire IMC was collected during most of the week's visit in each IMC. The data were summarized, noting commonalities and differences. Examples of each condition being studied were also given.

Conclusions

Observations: Physical Setting

All of the IMCs studied contained materials which were appropriate for a variety of learning styles and levels. Materials on-site ranged from preschool through high school and beyond, with the majority designed for reading levels of primary/intermediate grade students. Materials were available in varied formats, including printed materials and audiovisual materials. Access to these materials was appropriate for the student users, both in terms of shelf and card catalog heights, and in terms of availability of audiovisual materials and equipment.

in or near electrically wired study carrels or tables.

Student work in a variety of ways ranging from student-made picture books to joint student weaving projects was evident in all IMCs. There was evidence of concrete IMC experiences which focused on the senses, especially tactile and visual senses. The IMC decor in each location featured comfortable furniture, carpeting, attractive colors, and the like.

Thus, the physical setting in each IMC studied showed evidence of the conditions of positive atmosphere, feeling of value or acceptance, and being challenged. These observations of the physical setting are in keeping with the findings of Quandt (1972) who indicated the importance of the establishment of a positive atmosphere and making the child feel accepted as factors in promoting positive self-concept. Gordon (1972) indicated that the provision of a variety of stimuli was also important as a factor contributing to positive self-concept.

Observation Instrument

The observation instrument focused on three conditions being studied, namely cooperation, independence, and success. The findings are summarized below.

- 1) In general, there were no differences existing which varied depending on the day of the week.

- 2) Some activities occurred in one type of school more or less frequently than in others.

The occurrence of some activities more or less frequently than

others was the result of special emphases, such as the paperback book exchange area in the urban school, or differences in the IMC set-up, such as few interest centers in the suburban school. Some activities may have occurred less frequently as well because of different patterns of access to the IMC. In the urban IMC, for example, where students went to the IMC with a class on a weekly basis, less use of the IMC for studying was observed.

3) Studying alone and together occurred more frequently among students in grades 4-6 than students in grades K-3.

Studying among students in grades 4-6 was probably because class assignments and activities at this level encouraged the utilization of the IMC for this purpose; because students had received training over several years in reference, studying, and using IMC materials; because developmentally, students in grades 4-6 have longer attention spans than younger ones.

4) Grades K-3 used audiovisual materials and equipment together more than grades 4-6.

Use of audiovisual materials and equipment together by students in grades K-3 is probably because the use of audiovisual materials and equipment is new to primary grade students. They cooperated in natural, spontaneous ways in order to learn to use these materials, and in order to be successful in that use.

5) Activities such as checking out materials and returning materials were performed by students in all grade levels studied.

6) Of the three schools, the suburban and rural were the most

similar in terms of frequency of regular IMC activities such as use of the card catalog and use of audiovisual materials.

Similarities in terms of activity frequencies in suburban and rural schools is probably because the urban school's special May Day, Arbor Week, and paperback book exchange activities drew attention away from usual IMC activities.

7) IMC programs contribute strongly to the condition of independence.

The contribution to independence is in keeping with findings of factors contributing to positive self-concept as well as the philosophy and aims of school IMCs. Maslow (1968) described healthy people as having clinically observable characteristics including increased autonomy. Purkey (1970) named freedom as a factor conducive to the development of favorable self-images in students. Rogers (1969) viewed the evolution of one's own learning as one of the major means by which self-initiated learning becomes responsible learning. Media Programs: District and School (1975) indicates that effective media programs satisfy individual needs and help the student achieve greater self-motivation, and capacity for self-evaluation.

8) IMC programs contribute to the condition of cooperation.

In general, activities denoting cooperation were expected to be recorded more frequently than they actually were. There are several reasons which can be suggested for this discrepancy. Opportunities for independence were strongly stressed in both the philosophy of the media specialists and in actual practice. Cooperation was expected

to be a natural, spontaneous occurrence, and indeed it was. Examples of cooperation occurred, but many were of brief duration and occurred in areas not being observed in a five-minute interval. Where cooperation activities were observed on the instrument, they often occurred several times in a five-minute study. The analysis employed for this dissertation limited itself only to the presence of an activity for a five-minute segment. Thus, as many as 1-10 different occurrences of a cooperation activity may have taken place in a five-minute segment where presence only was noted in this study. A final suggested reason for the limited number of recorded cooperation components is the fact that cooperation activities as utilized by media specialists often revolve around skills lessons or activities. Most skills lessons for the year had been completed at the time of the study. During skills lessons, students are often trained to work together until they master a skill. Then, they are encouraged to work independently.

Cooperation activities were observed a sufficient number of times throughout the week of each study to warrant the finding that IMC programs contribute to the condition of cooperation.

Working together showed that IMCs not only provided the opportunity for cooperation, but that students took advantage of that opportunity. Cooperative activities are viewed as necessary in building a positive self-concept. This is in keeping with the findings of Johnson and Johnson (1974, 1975) who provided evidence to show that the cooperative goal structure in classrooms is the best in most affective and

cognitive learning situations. Fitts et al. (1971) indicated that experiences, especially interpersonal ones, were important in influencing the developing self-concept. Peterson (1979) and Trinkner (1962) also indicated that fostering a spirit of cooperation among students was an aim of IMC programs.

9) IMC programs contribute to the condition of success.

While the condition of success had only one activity occurring often enough for further analysis, that activity, namely satisfactory participation/completion of IMC activities, received the highest number of recorded occurrences of all the activities listed. Another activity in the success component, location skills used in searching, proved to be difficult to observe, since it was necessary to follow the activities of one student upon IMC entry until that student left, rather than observing one area. The final success activity, production, simply occurred too infrequently.

The contribution of IMC programs to success and the importance of experiences of success are in keeping with the findings of Cooper-smith (1967), Purkey (1970), Quandt (1972), and La Benne and Greene (1969). Aims of IMCs as they relate to the condition of success are described by many publications, including Media Programs: District and School (1975), Standards for School Media Programs (1969), and Peterson (1979).

One of the most interesting results of an examination of IMC activities using the observation instrument relates to activities which by and large did not take place in the IMCs which were studied.

These included:

- 1) Checking out books together
- 2) Checking out and returning audiovisual materials together and alone
- 3) Production together and alone
- 4) Using models together and alone.

While audiovisual materials were available in the IMC for frequent use, check-out of these materials seldom occurred, due probably to the ease of use in the IMC, and to limited home check-out of audiovisual materials. Students were so independent in checking out materials that they were not observed checking out materials together. This is understandable, especially since the study took place during the middle of the second semester. Had the study been conducted one to two months after school started, the results would have been expected to differ.

The lack of production opportunities during the week of each study accounted for the lack of recorded instances of production activities in two of the three schools visited.

Where models existed, they were observed as being handled from time to time. However, such handling generally was of short duration, and because of the instructions to the observers to begin observing in areas where an activity was taking place, by the time an observation period elsewhere was completed, manipulation of the model(s) was also completed, and thus was infrequently recorded.

The observation instrument itself needs further utilization before many changes are made. Depending on the time of year and circulation rules, for example, students could be observed checking out materials together and checking out audiovisual materials. The part of the instrument on "going to IMC" could be used for an IMC that has one main entrance, rather than several. Definitions for browsing and selecting might be more clearly defined.

To summarize, an analysis of the observation instrument showed evidence of the conditions of independence, cooperation, and success. Findings of researchers noted earlier in this chapter and in Chapter II support the importance of these conditions in promoting positive self-concepts in children.

Student Interviews of Grades 3-Up

Student interviews focused on all conditions being studied, namely cooperation, challenge, independence, success, feeling of value/acceptance, and positive atmosphere. The findings are summarized below.

- 1) Students felt good about using the IMC.

This was an important finding, for numerous research findings, including those provided by Coopersmith (1967), Knowles (1975), Maslow (1943) and Quandt (1972) stress the importance of the atmosphere, feeling accepted in an atmosphere, and experiencing success as factors contributing to positive self-concept.

- 2) No major differences in response by sex were noted.

3) Few differences by grade level were found.

Differences by grade level will be noted. (a) By fifth grade, students in all schools studied indicated that they went to the IMC most often in groups or alone, rather than with a class, which tended to occur more with younger students. (b) Students worked more cooperatively on class projects as the grade level increased in all schools studied. (c) Students in the third grade showed a preference for books more than other grades in expressing what they liked best of all about the IMC.

4) Students from the suburban school IMC indicated a strong preference for liking books best than did other schools studied.

5) Students from the rural school indicated a stronger preference for audiovisual materials.

6) Students from schools in rural and suburban communities indicated more use of the IMC to complete classwork, meaning work using text materials.

7) Students in the urban school were less likely to feel bad or uncomfortable about not finding materials for themselves.

8) In terms of what students liked best about the IMC, the favorite response was books, with miscellaneous responses combining for a distant second, followed by audiovisual materials and the media specialist/people.

9) No clear trend existed in whether there was a difference by grade level in the manner in which students used the IMC.

Except for the urban school, where use on the whole was less

frequent by individuals, students from suburban and rural communities showed frequent use of the IMC weekly, but no clear trends. At least one student in each school claimed to use the IMC from 10-20 times per week. The number of times the IMC was used per week by each student, especially in the rural and suburban schools, varied depending on class activities, and personal preferences.

10) There appeared to be no real discrepancy in what students preferred to do by grade.

There seemed to be enough variety for students at all grade levels to shift emphases from time to time. Students sometimes indicated that they "used to" do certain things a lot but now spent time on other things.

11) Students noted few restrictions placed upon them.

12) Students in grades 3 and 4 reported as many successes as did those in the fifth and sixth grades.

13) Students were able to perceive differences in the role of the media specialist and the aide, although they were not asked to describe what the differences were.

14) Most students used the public library in addition to the school IMC, regardless of type of school.

The quality of the nearest public library to the rural school students varied from that in the urban and suburban communities, with a smaller collection, fewer hours of operation, and less accessibility to professional staff.

15) Students of all grade levels were in agreement about their

enjoyment of the IMC and appreciation for its staff and activities.

Indication of enjoyment and appreciation was especially true of students who indicated that they had gone to other schools and had experiences which were not as enriching.

16) Students showed a general lack of interest in newspapers found in the IMC.

17) Students were ambiguous in their interest in magazines.

Students never strongly favored magazines when compared to other offerings of the IMC. However, students indicated that they had newspapers and magazines at home. Perhaps the emphasis was, therefore, on materials and experiences least likely to be duplicated elsewhere.

To summarize, student interviews showed that students found the IMC atmosphere to be positive, felt valued, had many experiences of success as well as opportunities for success, cooperated naturally and found the IMC to be an area which could challenge them. The importance of these findings is supported by research findings summarized in Chapter II. Among researchers indicating all or some of these conditions as important factors in positive self-concepts are Coopersmith (1967), Purkey, 1970), Rogers (1969), and Quandt (1972).

That the six conditions examined in this study are aims of IMC programs is supported in literature which devotes itself to school media programs, including Media Programs: District and School (1975) and Standards for Instructional Media Programs, 1977-82 (1977).

Media Specialist Interviews

The interviews with the media specialists focused on all the conditions being studied, namely cooperation, challenge, independence, success, feeling of value/acceptance, positive atmosphere. The findings are summarized below.

The philosophies of the media specialists were basically the same. Simply put, they believed that the IMC was a place where professionally designed activities and programs utilizing a variety of materials encouraged students to be self-reliant, pursue interests, engage in classwork, and experience numerous successes. It was seen as a place requiring the active support of the principal and teachers. Parental support was also encouraged. All media specialists felt it important for the IMC to be an inviting place. Thus, each IMC was especially decorated in ways that would invite student use.

The media specialists expressed a great deal of confidence in the abilities of the students, and in students' worth as useful and talented human beings. The media specialists wanted students to develop at their own level, and encouraged independent use of the IMC. However, they felt it essential that students know of their availability and receive personal attention whenever possible.

IMC activities to a great extent promoted independence. To a lesser extent, they promoted cooperation. Media specialists expressed the feeling that cooperation was often on a spontaneous level, but did design some skills activities in ways which would promote cooperation.

With few exceptions, the media specialists were of one mind in their belief of the worth of the individual student and need for media programs in promoting that worth. In responding, they expressed their personal as well as professional interests and philosophy in all the conditions being studied, namely cooperation, challenge, independence, success, feeling of value/acceptance, and positive atmosphere.

The philosophy of the media specialists is in keeping with the overall philosophy of school media programs which is discussed in Chapter II. The philosophy is well summarized in the national standards, Media Programs: District and School (1975) and in Wisconsin's state guidelines, Standards for Instructional Media Programs, 1977-82 (1977).

Diaries

The diary which was kept during most of each week's study focused on all areas being examined, i.e., cooperation, challenge, independence, success, feeling of value/acceptance, and positive atmosphere. Chapter IV describes in detail answers to the questions which the diary information addressed. That section shows that there were clear examples in each of the schools studied of the conditions being examined. Patterns which were evident will be described here.

Students gravitated to the media specialists throughout the week. Whether students were seeking assistance, sharing something that they located in the IMC or sharing something that they had brought in themselves, the students without doubt felt comfortable with the

media specialist. Students also felt comfortable in the media center. Even primary grade children could be seen using the entire IMC area, including audiovisual materials, often working together on utilizing audiovisual materials or sharing located materials. On a similar note, intermediate grade students also were comfortable and could be seen fondling stuffed animals and browsing or working in the area of the IMC in which easier materials were located. Natural teaming between upper and lower grade students could occur when students of all ages were in the IMC at the same time. Numerous examples of quick, spontaneous interactions were observed.

While examples of students staying with one activity were evident, such as reading or studying, activities observed in the IMC were often of short duration, even seconds. Yet, the great majority of these activities were purposeful ones.

It became evident that the philosophy of the teaching staff as well as the media aide also determined how students would utilize the IMC. Isolated instances of teachers moving a student from an area of personal interest to another were observed. Isolated instances of admonitions or restrictions from the media aide concerning utilization were also observed, as were about three instances of clearly heard putdowns of the children.

While a total of three examples such as those cited in the previous paragraph were far from a trend, it does suggest inhibitors in the IMC which might keep the IMC from promoting positive self-concepts as well as it could even with an excellent media specialist.

Diary observations reinforced the many positive aspects of the IMC programs which were observed, and did indeed, provide numerous examples of the IMC as it supported each of the conditions being studied, namely cooperation, independence, success, challenge, feeling of value/acceptance, and positive atmosphere.

Summary of Conclusions

Each research method was used to address conditions of self-concept being studied. A review of research findings shows that each method utilized, i.e., observation, interviews and diary, ultimately complemented one another. Varied emphases of research methods, whether factual, conceptual, or attitudinal, in the final analysis, supported and enhanced the findings of the other. The media specialist interviews, for example, showed that each had a clear perception of what students liked to do in their individual IMCs. The diary served to show the whole, while the observation instrument focused on its parts. The diary was better able to include activities of shortest duration.

While all conditions of positive self-concept being studied were supported in this study, independence, positive atmosphere, feeling of value or acceptance, cooperation, and success were strongly supported in all research methods in which they were utilized — observation, interview, diary. Being challenged was also supported, but it becomes less clearly so in a study which focuses heavily on observable actions. The diary and the physical description of

materials were well utilized for the condition, being challenged. The interview responses from both the media specialists and the students addressed the condition in a less direct fashion. The observation instrument was not designed to be used for this condition at all.

Findings of this study indicate that the IMC can make a difference in the individual child's development of a positive self-concept.

Recommendations

The study focused upon six conditions of self-concept and whether selected IMCs in Wisconsin could be said to possess these conditions. In each of the three IMCs studied -- a rural, an urban, and a suburban -- it was found that the six conditions existed.

Results of the study point toward providing, wherever possible, elementary school IMCs which focus on a program which can promote and enhance positive self-concepts in elementary school children. Schools selected for study met criteria which included the following: full-time professionally trained and certified media specialist; full-time media aide; variety of current print and audiovisual materials; program of activities and services directed by the media specialist.

The study suggests that those who utilize an elementary school IMC as simply a place where an aide decorates a bulletin board or checks out materials to students are not scratching the surface in terms of what a professionally directed media program can provide. It suggests that a seemingly natural and spontaneous program of activities

and services may bely the amount of planning, time, and effort involved in making it so.

Suggested Hypotheses

Studies at the descriptive level, such as the one undertaken here, are useful in suggesting hypotheses for further study. The suggested hypotheses follow.

- 1) Natural teaming of younger and older age children in elementary school IMCs will occur when students use the IMC freely and at similar times.
- 2) Primary grade students cooperate more often than intermediate grade students in IMCs.
- 3) Intermediate grade students use the IMC more for studying than do primary grade students.
- 4) Varying times of the school year produce differing degrees of cooperation and independence.
- 5) The media aide influences conditions of self-concept in the IMC.
- 6) The classroom teacher determines the manner in which students utilize the IMC to a great extent.
- 7) The attention span of students in the IMC differs not only because of age, but because of the activity and interest in that activity.
- 8) No philosophical differences in IMC programs exist by the type of community in which the school is found.

9) The IMC program reflects the philosophy of the media specialist.

10) Students are more likely to utilize those materials which are least likely to be found at home.

11) Students are more likely to favor materials which have been especially promoted by the media specialist or teacher.

12) Regardless of the variety of materials in an IMC, books will still be the favorite of elementary school students.

Recommendations

Based upon findings of the study, the following recommendations are made:

1) Recognize that the IMC program can promote certain conditions of self-concept. Develop and design the IMC program to reflect this knowledge, in cooperation with teachers.

2) Clearly state in written aims of the IMC that it is an intent of the IMC program to promote the development of positive self-concepts in children.

3) Make the IMC aesthetically appealing and its decor and furnishings appropriate for the age range being served.

4) Find ways in which student work can be utilized/displayed in the IMC.

5) Provide concrete experiences for elementary-age students which focus on the senses.

6) Design the IMC area and program with student production opportunities.

7) Employ interest centers to challenge students and stimulate interest.

8) Seek trained aides or train aides not only to carry out IMC operations but to understand the philosophy undergirding the IMC program.

9) Work with teachers and students to promote the utilization of and enjoyment of magazines and newspapers.

10) Work toward the development of good public library programs even in communities where elementary IMC programs such as those in this study are found.

11) Provide variety in terms of materials as well as program offerings.

12) At the higher education level, provide instruction and experiences which will promote the IMC program in terms of its contributions to positive self-concepts.

13) Consider microcomputers with their capabilities for independent as well as small group work among IMC activities which promote cooperation, independence, challenge, and success.

Further Study and Research

Findings of this study suggest the following areas for further study:

1) Study the condition of cooperation in IMCs, focusing not only on the presence of activities relating to cooperation, but the number of occurrences which take place in a segment of time.

2) Study the condition of success separately, especially that which involves an individual's use of location skills in searching for materials in the IMC.

3) Study the condition of challenge more thoroughly, especially as it relates to how the IMC offers challenges to the upper grade student or the academically gifted child.

4) Study resource sharing and its impact on the elementary school program, especially as it relates to gifted and other exceptional children.

5) Perform a study similar to the one undertaken in this dissertation on other levels, including:

(a) IMCs with a half-time professional media specialist and full-time aide,

(b) IMCs with a full-time professional and no aide,

(c) IMCs with a part-time professional and no aide.

(d) IMCs with a full-time aide and no professional.

(e) IMCs with a part-time aide and no professional.

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APPENDICES

APPENDIX A

Letter to Panel of Experts

September 29, 1980

Mrs. Babette Smith
Lake Center Elementary School
Portage Public Schools
10010 Portage Road
Portage, Michigan 49081

Dear Mrs. Smith:

You have been recommended by Patricia Slocum, School Library Media Specialist, Michigan Department of Education, to serve as a member of a five-member panel of experts made up of outstanding media professionals. This panel of experts will provide input into a research study that I will be conducting in my role as director, Bureau of Instructional Media Programs, Wisconsin Department of Public Instruction, and in fulfillment of requirements for my dissertation in the area of instructional media and technology.

Specifically, the study is designed to determine whether an elementary school IMC with a professional media specialist, a collection containing a variety of print and audiovisual materials, adequate facilities, and a program of activities has components which can be identified as being those which promote a positive self-concept in elementary school students. Conditions to be examined are as follows:

positive atmosphere
feeling valued/accepted
fostering cooperation
independence
being challenged
experiencing success

The study will be conducted in Wisconsin using a case-study approach. Three elementary school IMCs with full-time professionals will be invited to participate. Using a special piece of equipment called an "SSR" to facilitate observations, each school IMC will be visited for one week by two persons. Schools will represent urban, suburban, and rural settings.

As a member of the panel of experts, you would be asked to do the following:

- (1) comment on what is to be observed. For example, is observing a child using audiovisual equipment alone an indication of "independence"?

Mrs. Babetta Smith
September 29, 1980
Page 2

- (2) comment on the observational model that is developed
- (3) review the questionnaire developed for media specialists in the three selected schools to fill out
- (4) review the interview questions prepared for use of researcher in interviewing selected student users of the IMC

Basically, the role of the panel of experts is to react to instruments developed to help establish the study's validity and reliability.

Persons who have already agreed to serve on the panel of experts include:

Marilyn Miller, Associate Professor
School of Library Science
University of North Carolina--Chapel Hill
Chapel Hill, North Carolina

Jacqueline G. Morris, Consultant
Indiana Department of Education
Division of Instructional Media
Indianapolis, Indiana

Other members of the panel of experts will be two full-time elementary media specialists and one district media director.

My only caution to you in accepting is that the time line on materials that are sent will be fairly tight. I will need to have comments returned to me within two weeks after their receipt.

Your work as a panel member--should you accept--will primarily cover the six months of late October, 1980, to March, 1981.

Considering Pat Slocum's recommendation, I know that your input would be valuable. I do hope that you will be able to accept. For ease in responding I have enclosed an addressed, stamped postcard, which should be returned as soon as possible, but no later than October 10, 1980.

Mrs. Babette Smith
September 29, 1980
Page 3

Thank you for your consideration.

Sincerely,

Dianne McAfee Williams

Dianne McAfee Williams
Director
Bureau of Instructional Media Programs

(608) 266-1965

enclosure

DMW:mm

Similar letter to
Mrs. Bernice Lamkin
Spring Lake Schools
and
Ms. Patricia Carlson
Rosewood Elementary
Jenison, MI 49428

September 29, 1980

Ms. Jacqueline G. Morris, Consultant
Indiana Department of Education
Division of Instructional Media
229 State House
Indianapolis, Indiana 46204

Dear Jackie,

Thank you so much for agreeing to serve as a member of the five-member panel of experts who will provide input into my research study on self-concept and elementary school IMCs.

I thought I'd better give you a little more information in preparation for your upcoming responsibilities. Specifically, the study is designed to determine whether an elementary school IMC with a professional media specialist, a collection containing a variety of print and audio-visual materials, adequate facilities, and a program of activities has components which can be identified as those which promote a positive self-concept in elementary school students. Conditions to be examined are as follows:

positive atmosphere	independence
feeling valued/accepted	being challenged
fostering cooperation	experiencing success

The study will be conducted in Wisconsin using a case-study approach. Three elementary school IMCs with full-time professionals will be invited to participate. Using a special piece of equipment called an "SSR" to facilitate observations, each school IMC will be visited for one week by two persons. Schools will represent urban, suburban, and rural settings.

As a member of the panel of experts, you will be asked to do the following:

- (1) comment on what is to be observed. For example, is observing a child using audiovisual equipment alone an indication of "independence"?
- (2) comment on the observational model that is developed
- (3) review the questionnaire developed for media specialists in the three selected schools to fill out

Ms. Jacqueline G. Morris, Consultant
 September 29, 1980
 Page 2

- (4) review the interview questions prepared for use of researcher in interviewing selected student users of the IMC

Basically, the role of the panel of experts is to react to instruments developed to help establish the validity and reliability of the study.

The panel of experts will consist of building-level, full-time media specialists, one district-level media director, one state department of public instruction media consultant, and one university professor in the school media field.

My only advance warning to you is that the time line will be fairly tight. I will need to have comments on materials sent you returned within two weeks after your receipt of the materials.

Your work as a panel member will extend over the months of late October, 1980, to March, 1981.

That's it for now. Thank you again!

Sincerely,

Dianne

Dianne McAfee Williams
 Director
 Bureau of Instructional Media Programs

(608) 266-1965

DMW:mmm

Same letter to:

Dr. Marilyn L. Miller
 Associate Professor
 School of Library Science,
 Manning Hall
 University of North Carolina
 --Chapel Hill
 NC 27514

APPENDIX B

Conditions to be Examined

Conditions to be Examined

fostering cooperation
 independence
 success
 positive atmosphere
 being challenged
 feeling valued/accepted

Fostering cooperation

Observe:

children playing games; activities requiring a minimum of 2 people.
 IMC skills activities designed for groups
 teaming of primary/intermediate students for storytelling, etc.
 peer couple activities. Eg. - studying together, selecting books together, and voluntary couple activities.

Independence (Utilization alone). Observe:

use of audiovisual equipment alone
 use of audiovisual materials alone
 production of media alone or with limited assistance
 ability to use card catalog and find what is being sought
 ability to go to IMC alone

Success Observe:

satisfactory participation in or completion of an IMC/game/activity/production
 location skills in finding what is desired
 steps used in locating and using what is desired

Being challenged

Observe:

- presence of variety of materials in varied formats, interests,
level of difficulty
- presence of games like calendar clues
- production opportunities
- other activities — write a letter to author, etc.
- use of a variety of materials by children, eg. small children
using advanced material

Feeling valued/accepted

Observe:

- displays of student work in the IMC
- work as student assistant (describe)
- ease in talking with librarian
- ease in seeking help from librarian, others
- ease in browsing or seeking out what is needed, even alone
- student taking initiative in class discussions in the IMC

Positive Atmosphere (physical characteristics)

Look for:

- lots of materials/displays which focus on senses — feel, touch,
smell, sight, hearing, and seeing students use them.
- presence of equipment, materials, which are accessible, not locked
in a closet
- decorated in ways that would invite/encourage student use, i.e.,
warm colors, plants, student work, comfortable furniture,
animations, subjects of interest to children.
- accessibility for small children — ease of reach to touch and
manipulate.

APPENDIX C

Survey

[illegible]

Form 2		FI-080-17
II. IMC COLLECTION AND PROGRAM (continued)		
16. Are classes scheduled in the IMC? ☐ No ☐ Yes <i>Indicate class length</i> _____ minutes each Are all classes scheduled each week? ☐ Yes ☐ No <i>Comment, if necessary</i> <i>If no, which grades have scheduled classes each week?</i>	17. Is there any time during the week when no classes are scheduled? ☐ No ☐ Yes <i>Indicate percentage of time during week when no classes are scheduled:</i> ☐ 0-25% ☐ 51-75% ☐ 26-50% ☐ 76-100%	
III. FACILITY		
18. Estimated Total Square Footage of IMC	19. Physical Environment of IMC <i>Check if IMC contains any of the following</i> ☐ study carrels <i>Indicate number</i> _____ ☐ production area for students ☐ small group conference room or location ☐ leisure seating such as bean bags, wheeled seats, couch ☐ storytelling area ☐ classroom for use of media specialist and other IMC users ☐ AV preview area	
IV. ACTIVITIES		
20. IMC Activities: <i>Check all that apply</i> ☐ Open use by individuals ☐ Student use of AV equipment ☐ Open use by groups ☐ Story Hours ☐ Special IMC observations/programs ☐ Student use of interest centers* ☐ IMC instruction ☐ Self check-out of materials by students ☐ Student use of AV materials ☐ Production of AV materials <i>Check if production of AV materials includes:</i> ☐ laminating ☐ transparency-making ☐ audiocasting ☐ photography ☐ film-making ☐ poster-making ☐ dry-er printing ☐ Other <i>Specify</i> _____		
21. Percentage of school's enrollment using IMC during a typical week ☐ 0-25% ☐ 51-75% ☐ 26-50% ☐ 76-100%	22. Are you involved in the teaching of IMC skills to students? ☐ No ☐ Yes, <i>Check the one description below which best describes the IMC Skills Program.</i> ☐ Developed and taught completely by the media specialist ☐ Primary Responsibility of media specialist with some teacher participation ☐ Cooperatively developed and taught by teachers and the media specialist ☐ Primary responsibility of the teacher with some help from media specialist	
23. Are student assistants utilized in the IMC? ☐ No ☐ Yes, <i>How often?</i> ☐ never ☐ often ☐ occasionally ☐ always	24. Are adult volunteers used in the IMC? ☐ No ☐ Yes, <i>Number of adult volunteers</i> _____ <i>Number of hours a week</i> <i>adult volunteers are present</i> _____	
* "An interest center, table, or carrel represents an area (or areas) in the IMC which is changed from time to time, and focuses on subjects designed to stimulate natural curiosity, individual learning, and personal growth in students. The interest center is usually made up of print and audio-visual materials and may focus on holidays, classroom units, and other topics."—Definition based on 101 Media Center Ideas by Eleanor Silverman.		
Thank you for taking the time to complete this survey.		

BEST COPY AVAILABLE

APPENDIX D

Letter to District Administrators About Survey

December 10, 1980

Dear Superintendent:

I am in the process of gathering preliminary information for a study that will be conducted in spring, 1981, on the special educational contributions of elementary school libraries or instructional media centers (IMCs) which have full-time librarians or media specialists.

While the actual study will focus on an on-site visit to three elementary schools in Wisconsin, it is necessary for me to send a survey instrument to thirty (30) librarians/media specialists in the state as a basis for selection of schools to be visited. I would like very much to have (schools) from your district receive the survey which will be sent in early January, 1981.

The survey will be mailed directly to the librarian/media specialist at (schools) with your permission. Completion of the survey instrument does not obligate the school or the district to participate in the on-site study. It simply indicates that the school will be considered as a possible visitation site in spring, 1981.

A draft of the survey instrument is enclosed for your information. You may use the addressed, stamped postcard for your response, or I will call in a few days to discuss the survey with you further. Thank-you for considering this request.

Sincerely,

Dianne McAfee Williams

Dianne McAfee Williams, Director
Bureau of Instructional Media Programs
(608) 266-1965

DMW:mkg

APPENDIX E

Letter to Media Specialists Requesting
that They Fill Out Survey

Your district administrator has given his permission for you to complete the enclosed two page survey. It is being distributed to a small group of thirty Wisconsin full-time elementary school librarians or media specialists.

The purpose of the survey is to provide preliminary information relating to a study of special educational contributions of elementary school libraries or instructional media centers (IMCs) to the elementary education program. Based upon survey results, three schools will be invited to participate in the next part of the study, that of an on-site visitation in spring, 1981, to the library or IMC to observe activities in action. Completion of this survey does not obligate the school to participate in the on-site visitation.

I hope that you will take the time to complete this brief survey and return it to me by February 1, 1981, using the enclosed self-addressed, stamped envelope. Because of the small number of persons asked to complete the survey, return by all persons receiving it is especially important.

Thank you for your assistance!

Sincerely,

Dianne McAfee Williams

Dianne McAfee Williams
Director, Bureau of
Instructional Media Programs
(608) 266-1965

Encl.

APPENDIX F

Criteria Utilized in Evaluating Survey Instruments
Completed by Elementary School Media Specialists

CRITERIA UTILIZED IN EVALUATING SURVEY INSTRUMENTS
COMPLETED BY ELEMENTARY SCHOOL MEDIA SPECIALISTS

GENERAL: No points were assigned, but it was felt that the following were necessary:

- (1) Media specialist in school a minimum of three years.
- (2) Principal employed in the school a minimum of three years.

No points were assigned, but it was felt that the following were desirable:

- (1) School enrollment between 400-600 students.
- (2) Master's degree in instructional media field.
- (3) Proximity to Madison

CRITERIA UTILIZED AND POINTS GIVEN:

	<u>Maximum Points</u>
Certification as librarian and audiovisual coordinator.	1
Full-time equivalent of an aide.	1
Wide access to many materials, i.e., books, magazines, newspapers, audiovisual materials. Minimum of 10,000 books.	2
Flexible (open) scheduling for at least 25 percent of week.	1
Flexible (open) scheduling for at least 50 percent of week.	2
At least four out of eight items checked under "physical environment."	1
At least eight out of ten items checked under "IMC activities."	1
Within that, if production of AV materials includes at least three of the seven categories.	1
Seventy-six to 100 percent estimate of student use each week.	2
Fifty to 75 percent estimate of student use each week.	1

	<u>Maximum Points</u>
If media specialist is involved in teaching IMC skills with some participation from teachers.	1
If media specialist is involved in teaching IMC skills cooperatively developed and taught by teachers and the media specialist.	2
Use of student assistants in IMC program.	1
Use of adult volunteers.	.5
TOTAL NUMBER OF POINTS AVAILABLE 14.5	

APPENDIX G
Observation Model

DLS OBSERVATION MODEL

NAME OF OBSERVER: _____ DATE: _____ NAME OF SCHOOL: _____

AREA EXAMINED: _____ TIME PERIOD: _____ AGE GROUP RANGE: _____

Freq./How Many <i>Together</i>		Pr.	Pr.	Freq./How Many <i>Alone</i>	Compared to What
FOSTERING COOPERATION VOLUNTARY				Going to IMC	
				Using card cat.	
				Browsing	
				Select. books	
				Select. AV mat.	
				Check. out books	
				Check. out AV mat.	
				Return. mat.	
				Reading	
				Studying	
				Using AV mat.	
				Using AV equip.	
				Using Int. Ctrs.	
				Production	
				Using models	

INDEPENDENCE

		Pr.	Freq/How Many	Compared to What
COOPERATION REQ. VOL.	Teaming of int./primary students			
	Game playing			
	Skills activities together			
INDEPENDENCE REQ. VOL.	Production w/limited assistance			
	Using AV equipment w/limited assistance			
	Skills activities alone			
SUCCESS	Location skills used in searching			
	Satis. participation/completion IMC activities			
	Satis. participation/completion IMC production			
Other:				

APPENDIX H

Observation Activity Definitions Utilized

OBSERVATION ACTIVITY DEFINITIONS UTILIZED

Going to IMC

Alone - Observing a student entering IMC alone who shows no signs of being accompanied by others.

Together - Group of no more than six or less than two entering IMC together.

Using card catalog

Alone - Use of trays, looking in cards, all appearances of use, e.g., careful examination, writing information down.

Together - Students using some trays at same time, giving an appearance of examination together.

Browsing - Physically walking through shelf areas; looking at materials; going up and down shelves.

Together - If they are with another talking, pointing things out, sharing.

Alone - Independent.

Selecting books - student(s) in one section of shelves only as opposed to "browsing."

Together - If they are with another choosing together same materials.

Alone - Independent.

Selecting AV - physically pulling out AV box from shelf; examining contents.

Together - With at least one other choosing.

Alone - Independent.

Checking out books - includes magazines

Together - Removing card; signing for same book or material.

Alone - Independent check-out by student.

Checking out AV materials - removing card; signing. To be together, they must be sharing same material.

Returning materials

Together - Only if they are returning the same material.

Alone - If a child has materials himself without any sharing of contents.

Reading

Together - Sharing one book; sharing a book that one is reading with another.

Alone - Eye movement and concentration on book.

Studying

Together - Paper and pencil/pen present and in use; child drilling another (e.g., on spelling).

Alone - Use of materials in conjunction with pencil/pen or paper.

Using AV materials - viewing, listening, etc.

Together - If another child is sharing activity.

Alone - Independent.

Using AV equipment - setting up equipment; inserting materials

Together - If activity is jointly pursued.

Alone - Independent.

Using interest centers

Together - Sharing.

Alone - Individual using/examining interest center materials.

Production

Together - Students producing together on same project.

Alone - Student independent in production.

Models - manipulation of models on display (touching, etc.)

Together - With someone else engaged in same activity; sharing.

Alone - Student is independent in manipulation.

Teaming - purposeful activities engaged in together by older and younger students. Should also use another category when using this to indicate what they are doing (e.g., reading, studying).

Game playing - games distinguished by rules; usually in a box of some type. May be supplied by IMC or outside IMC. May also be electronic (spelling, math).

Skills activities - required and led by teacher or media specialist. May be together (such as working in pairs) or alone.

Production w/limited assistance - not setting up whole thing; someone comes, then goes away.

Equipment w/limited assistance - not setting up whole thing; someone comes then goes away.

Location skills success - following a child with evidence of use of card catalog, shelf selection, check-out or go to table and study/read.

Satisfactory participation/completion of IMC activities - will take from from the following categories and automatically plug in: game playing, check-out. Also used for required IMC skills where completion is observed.

Use also for overt actions showing satisfaction; spoken words of success; smiles with what's being done.

Satisfactory participation/completion of IMC production - observe student alone or with someone engaged in IMC production such as laminating.

APPENDIX I
Letter to Schools Selected

March 16, 1981

I appreciated the opportunity to talk with (names) last week. During our conversation, I received permission to feature your school as the suburban elementary school selected for a one-week, on-site visitation study designed to highlight special educational contributions of elementary school instructional media centers (IMCs) which have full-time media specialists.

The one-week study will be conducted the week of March 30, 1981, as we agreed. During that week, your school IMC will be visited by a team of three persons and me as researcher and interviewer.

This study is approved by the Department of Public Instruction as departmental research. It will also be used in partial fulfillment of requirements for a Ph.D. in educational media and technology.

The study will involve observation of IMC activities, an interview with the media specialist, and interviews with twelve (12) students in Grades 3-6.

I will see you on Thursday, March 19, 1981, for a visit at 3 p.m. with you.

Thank you.

Sincerely,

Dianne McAfee Williams

Dianne McAfee Williams
Director
Bureau of Instructional Media Programs

(608) 266-1965

DW/ss
cc

APPENDIX J
Letter of Consent

March 27, 1981

Dear Parent,

I am writing to ask permission for your child to be interviewed by a supervisor of school libraries of the Wisconsin Department of Public Instruction.

Two staff members of the DPI will be visiting (school) during the week of March 30 through April 3. The purpose for their visit is to gather information about the activity which takes place in a good elementary school library.

Part of what they hope to learn is the perspective of the school library as seen by the student. They will gather this information by interviewing 12 students in grades three thru six. We have selected your child from a random sampling of our students for one of these interviews. The interview will take about twenty minutes and should prove to be a worthwhile learning experience for those who participate.

Please return the permission slip below on Monday, March 30.

Thank you for your help.

Sincerely,

(name)
Principal

CEN/sjh

I give permission for _____
to be interviewed by a staff member of the Department of Public
Instruction during the week of March 30-April 3.

I do not give my permission for _____
to be interviewed by a staff member of the Department of Public
Instruction during the week of March 30-April 3.

Signed _____

Parent

April 20, 1981

Dear Parent:

(Name of school) children have been chosen to participate in a study designed to examine the manner in which the school's library is used by students. As a student at (school), your child will be a participant. As part of the study, students will be observed as they use the school library during the week of April 27 to May 1, 1981. In addition, a few students will be asked to participate in brief interviews of approximately 20 minutes each. Your child has been selected to share information about how students use the library in an interview. NOTE: School administrators have approved this study.

District policy dictates that parents be informed of this project. If you do not wish to have your child participate in the interview, either sign this form and return the lower portion of this letter to (school) by April 28, 1981, or call the school office at (phone).

Thank you.

Dianne McAfee Williams

Dianne McAfee Williams

Director

Bureau of Instructional Media Programs

DW/ss

-----detach here-----

I do not give permission for _____
to participate in the library utilization interview as described above.

(date)

(signature, parent/guardian)

APPENDIX K

On-Site Interview with Students

ON-SITE INTERVIEW WITH STUDENTS
(Grade 3-6)

1. What is your first name?
2. What grade are you in?
3. Have you used the IMC ever since you came to (name of school)?
4. Do you know who the media specialist is? What is her name?
5. Do you ever use other libraries? Which ones?
6. How do you feel about coming to the IMC?
7. How many times a week do you usually come to the IMC?
8. Do you ever come by yourself? How often?
9. Do you ever come with a small group of students from your class?
How often?
10. Do you ever come with your class? How often?
11. What do you usually do when you come?
12. How often do you:
 - check out books?
 - check out audiovisual materials?
 - use audiovisual materials? What kinds of AV materials do you use?
 - use interest tables? (Question asked giving interest tables in that IMC as examples.)
 - have something on display?
 - read books?
 - read magazines?
 - read newspapers?
 - make some of your own materials in the IMC?
 - use reference materials in the IMC?
 - play with games in the IMC?
 - use equipment?
13. Can you find what you are looking for in the IMC by yourself?
How often?
14. When you cannot find what you are looking for in the IMC, what do you do?

15. How did you learn to find what you are looking for by yourself?
16. Do you ever ask the media specialist for help? What happens when you do?
17. Do you ever ask the aide for help? What happens when you do?
18. Do you ever ask other students for help? What happens when you do?
19. Do you ever ask student assistants for help? What happens when you do?
20. Is there anything in the IMC that you need permission to do?
21. Is there anything in the IMC that you always need help with?
22. How do you feel when you're able to find what you need in the IMC by yourself?
23. How do you feel when you are not able to find what you need by yourself?
24. When you cannot or you do not find what you are looking for, what are the reasons?
25. Do you ever help other people?
26. Do you ever work with other boys and girls while you are in the IMC? How often? On what kinds of things?
27. Do you ever use the IMC to complete work related to your class-work? How often?
28. What do you like best of all about the IMC?

APPENDIX L

On-Site Interview with Media Specialist

ON-SITE INTERVIEW WITH MEDIA SPECIALIST

BACKGROUND

To your knowledge, how long has an IMC existed in this school?

How long as the school had a full-time media specialist?

How long has the school employed an aide in the IMC?

Are there other libraries in the _____ area? Which ones?

If yes, do students use any of these? Which ones?

In your opinion, what do parents in the community generally feel about the value of libraries? What makes you think so?

In your opinion, what do teachers in this school generally feel about the value of libraries? What makes you think so?

GENERAL ATTITUDE

How vital do you feel the IMC program is to the school's instructional program? Why do you think so?

What do you feel are the most valuable contributions this IMC offers to students?

In what ways do these contributions help the students?

What kinds of things do you feel students are capable of doing in the IMC?

What do you try to help students achieve by the time they complete the 6th grade? In skills? In attitudes? In library usage?

Do you feel students like to come to the IMC? Why?

What kinds of IMC materials should students be allowed to use? Why?

What kinds of IMC materials do students prefer to use?

What kinds of IMC activities should students be involved in? Why?

IN THE IMC

What opportunities do students have to use the IMC independently?

What percent of the student enrollment do you feel takes advantage of the opportunity to use the IMC independently each week? Why do you believe this is so?

Is independent use of the IMC encouraged? If yes, by whom? How is this encouraged?

Describe the role that the average classroom teacher plays in the IMC program.

On the whole, how involved would you say teachers are in the IMC program?

What do you see as the teacher's role in promoting the use of the IMC?

What do you see as the principal's role in promoting the use of the IMC?

Do you have any teaching background? Describe it.

Are there any adult volunteers in the IMC? What do they do?

How are your student assistants selected? Tell me about their responsibilities.

Did you ever plan any special events or activities for students? Explain.

Do you ever plan any special events or activities for teachers? Explain.

Do you ever plan any special events or activities for parents? Explain.

Is there any encouragement to have students work together in teams? Tell me about it.

In grades K-2:

What do most students do when they are interested in finding something in the IMC?

Are students generally successful in finding what they are seeking? What percentage do you feel is successful?

For those students who are unsuccessful, what are the primary reasons for the lack of success?

In grades 3-4:

What do most students do when they are interested in finding something in the IMC?

Are students generally successful in finding what they are looking for? What percentage would you feel is successful?

For those students who are unsuccessful, what are the primary reasons for their lack of success?

Estimate the percentage of students who successfully use the card catalog.

In grades 5-6:

What do most students do when they are interested in finding something in the IMC?

Are students generally successful in finding what they are looking for? What percentage would you feel is successful?

For those students who are unsuccessful, what are the primary reasons for their lack of success?

Estimate the percentage of students who successfully use the card catalog.

Do you think that students feel free to come to you with questions concerning what they are seeking?

What percentage of the time do you feel students use the IMC for recreational purposes?

What percentage of the time do you feel students use the IMC for personal inquiry?

What percentage of the time do you feel students use the IMC for fulfilling class assignments?

How often would you say the average student checks out books?

How many books at a time may students check out?

Can students check out audiovisual materials for building use? For home use? If yes to either, do they?

To what extent do you encourage student participation in the IMC skills class sessions?

To what extent do you encourage student participation in IMC programs?

What kinds of interest tables or activity centers do you have during the year?

What do you see as the main reason for interest tables in the IMC?

How often are interest tables changed?

How many interest tables do you generally have at one time?

What does the IMC aide enable you to do?

Describe what you would see as the ideal IMC program at _____ school.

APPENDIX M**Introduction for Student Interviews**

INTRODUCTION FOR STUDENT INTERVIEWS

Hi! My name is Miss Williams. You've probably seen me in the IMC with another lady (or two other people if interview occurred on day of second interviewer's visit). We've been visiting to see the kinds of things that students do in the IMC. I wanted a chance to talk with some students myself to learn what they do.

I'm going to ask you some questions about how you use the IMC. I'm going to record our conversation on tape so that the conversation can go faster and so that I won't have to write down what you say.
Ok?

APPENDIX N**Summary Sheet for Student Interviews**

SCHOOL _____ GRADE _____ SEX _____
Student since _____ Who librarian? ____ yes ____ no
Other libraries: _____

Feelings about coming? _____

How many times/week? _____ By self ____ Class ____ Group ____
Do? _____

Check out books? ____ yes ____ no
How many/week? _____
How often? _____
Other _____
Use AV? ____ yes ____ no
Which ones? _____
How often? _____
Other _____
Interest tables? ____ yes ____ no
Which ones? _____
How often? _____
Other _____
Display? ____ yes ____ no
When? _____
What? _____
Read books? ____ yes ____ no
How often? _____
How long? _____
Other _____

Read magazines? ☐ yes ☐ no

How often? _____

How long? _____

Which ones? _____

Other _____

Make anything? ☐ yes ☐ no

What? _____

When? _____

Comment _____

Use reference materials? ☐ yes ☐ no

Which ones? _____

How often? _____

When? _____

Comment _____

Play with games? ☐ yes ☐ no

Which ones? _____

How often? _____

When? _____

Comment _____

Use equipment? ☐ yes ☐ no

Which ones? _____

How often? _____ Who taught? _____

When? _____

Comment _____

Find by yourself? ☐ yes ☐ no ☐ sometimes

How often? _____ Other _____

Comment _____

When you can't find it, asks:

____ Media specialist _____ / _____ Student asst. _____

____ Teacher _____ / _____ Aide _____

____ Aide #2 _____ / _____ Parent/volunteer _____

Need permission to _____

Always need help with _____

Feel when independent _____

Feel when can't find _____

Why can't find? _____

Help other people? ____ yes ____ no other _____

Who? _____ How often? _____

Work with other boys and girls? ____ yes ____ no other _____

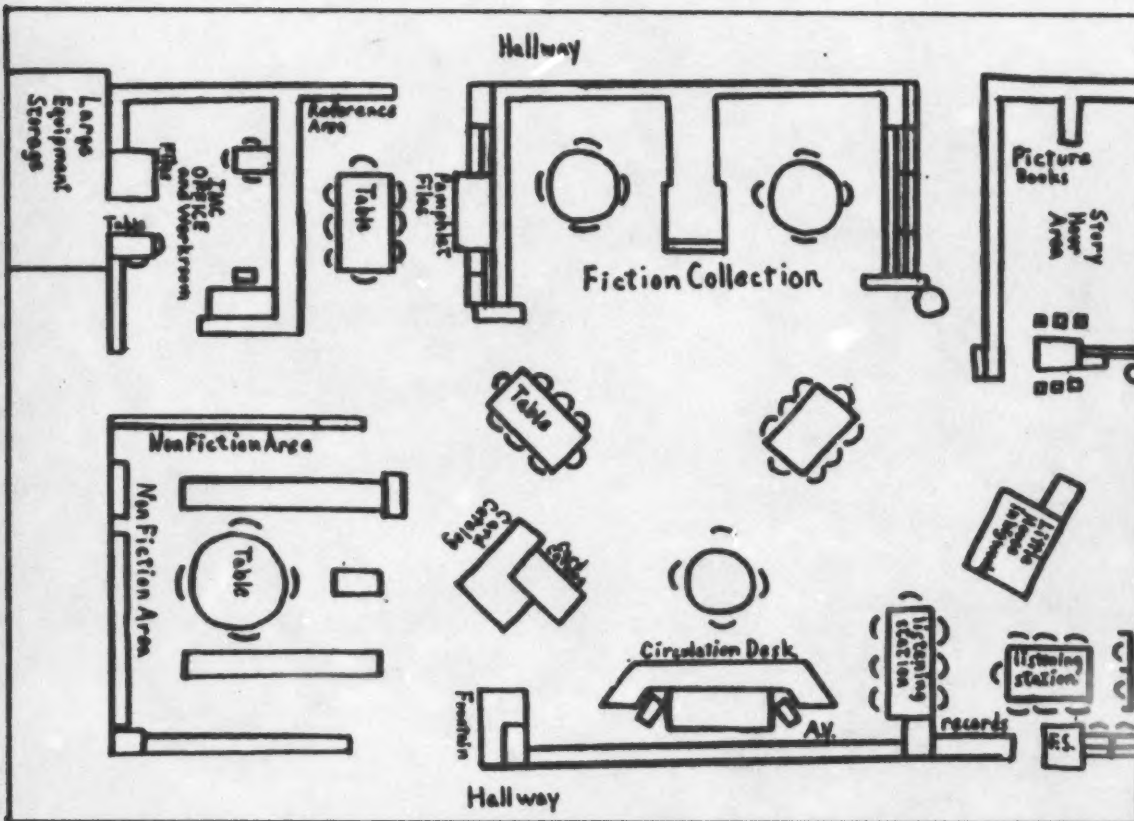
Complete classwork? ____ yes ____ no other _____

What kind? _____ How often? _____

What like best about IMC? _____

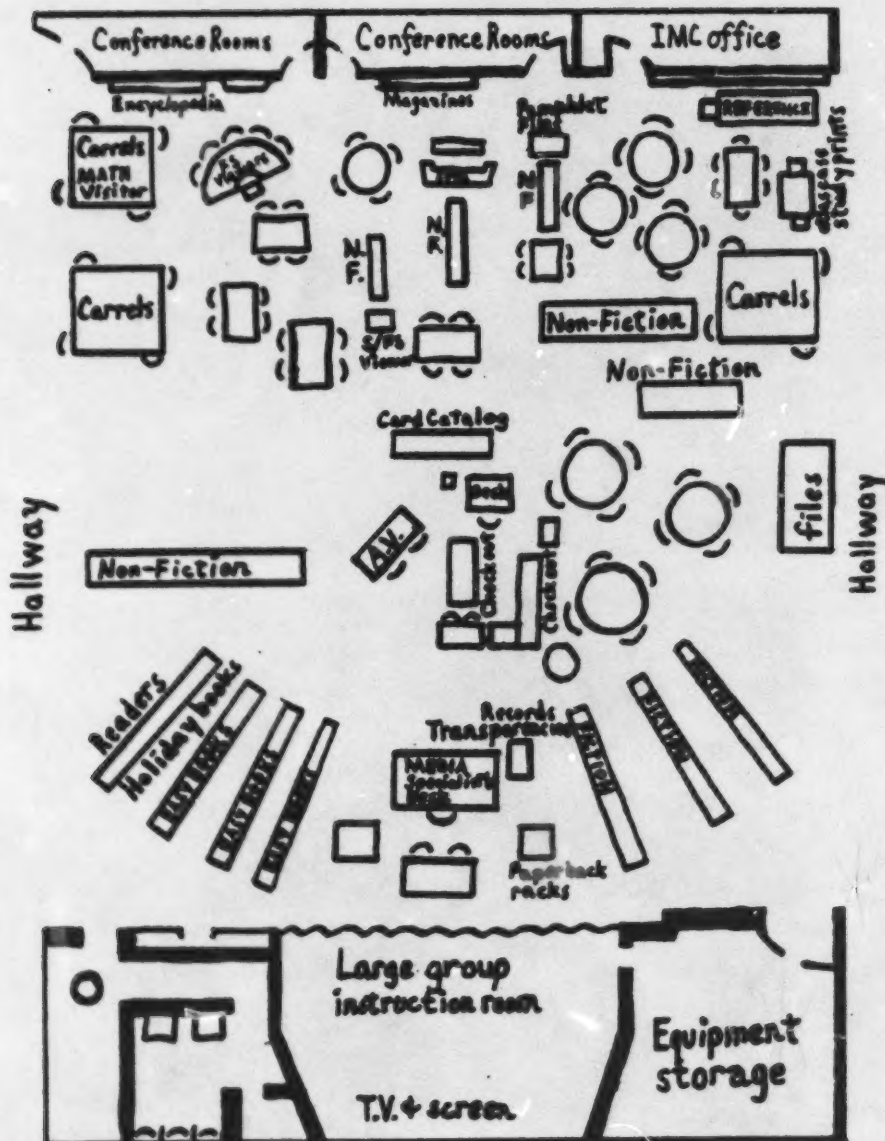
APPENDIX O

Diagram of Urban Community's IMC



APPENDIX P

Diagram of Suburban Community's IMC



APPENDIX Q

Diagram of Rural Community's IMC

